



NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR



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# Declication-

**6 6** There is only one successto be able to spend your life in your own way. **9 9** 

- Christopher Morley

he above lines are very much suitable for the ones who build their own world, by building their own livelihood. Those brilliant minds, often known as entrepreneurs, are the ones who create their businesses by solving a problem that people are willing to pay for. These assets of the nation play a key role in creating jobs and increasing the GDP.

They set a wave of driving innovation, bringing amusing incentives to improve our quality of life.

The idea of entrepreneurship has been prevalent since ancient times comprising merchants, artisans, craftsmen, etc., butthe sector has witnessed a drastic boom recently. Along with the dire consequences of Covid-19, an astonishing eruption has occurred in the area of entrepreneurship. The unfortunate days of layoffs and inactivity have inspired many passionate minds to bring their ideas into reality. The arrival of vaccine manufacturing companies, expansion of the IT industry and delivery apps are no new examples to mark the heights achieved by entrepreneurship.

India is progressing rapidly in the sector; promoting and fortunately getting an increment in the ideas of entrepreneurship. Tea time? Can anyone miss the option of Amruttulya? Want to transfer money? Just Paytm it. Are you having any items due on your Flipkart list? Not to forget the charm of Zomato, Swiggy, Nykaa, Ola, and a long list of names still adding on! It fills us with pride to tell that all these super useful services are a result of the revolutionary thinking and working of Indian entrepreneurs.

India has achieved the third-largest startup ecosystem in the world, with 4-5% of GDP being contributed by startups.

Thus, we dedicate this year's Shilpi to all the entrepreneurs out there and thank them for being an asset as well as an inspiration to many budding minds.





### It gives me immense pleasure and pride to present the 2022 edition of "SHILPI" the annual magazine brought out by the Literary Committee of NIT Raipur.

To unearth the talents of the students, to nurture them, to showcase their writing skills, and to express their outlook on the current national situation, the literary committee of the institute has always done a great job. However, today's challenges are very different from those of the past. Tools based on technologies like artificial intelligence and machine learning have given us many amazing things in the last few years. ChatGPT is one of the examples in the series of human creations that has gotten a hugely positive reception. As per Kevin Rose of the New York Times, the tool is able to generate impressively detailed and human-like text. The young generation about to start their professional lives may find it challenging and exciting that their creativity will be tested by taking the creation of some very well-trained machines as a benchmark. At this point, I would suggest you use your human instinct, through which mankind had completed his journey so far.

I do appreciate and applaud the efforts of students, faculty, and staff for the successful completion of this tedious yet daunting task of putting together the myriad thoughts and dreams of students into a meaningful and delightful form called "SHILPI". I extend my heartiest congratulations to the editors and coordinators for bringing out magazine and to all these who have invested their valuable time in realising this goal.

I wish the committee well in their future endeavours.

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Dr. (Mrs.) A. B. Soni Director NIT Raipur

## Message from the faculty.... The power of the written word is boundless, and its impact can last a lifetime.

he annual college magazine is an important platform for showcasing the creativity and intellectual abilities of our students. It provides an opportunity for students to express their ideas and thoughts through various forms of art and literature.

As an engineering college, we focus on imparting technical knowledge and skills to our students. However, we also believe in the holistic development of our students, which includes their creative abilities. The magazine provides an ideal platform for our students to showcase their creative talents and explore their interests beyond the technical domain. As we look through the pages of Shipi, we are reminded of the power of language and the beauty of literature.

Team LITERATI has worked tirelessly to ensure that this year's magazine is a true reflection of the creativity, diversity and achievements of our student body. We have received an overwhelming response from our students, with submissions ranging from poetry, short stories to technical articles. The quality of the submissions has been exceptional, and it was a challenging task to select the best of them for publication.Your passion for language and commitment to excellence is truly admirable, and we are confident that your contributions will inspire and captivate our readers.

We would like to extend our gratitude towards the Director ma'am and Dean student welfare for their continued support and encouragement in making Shilpi a success. We would also like to congratulate the team LITERATI and all the students who have contributed to this year's magazine. Your hard work and dedication have resulted in a truly exceptional publication that we can all be proud of. We encourage everyone to take some time to read through the magazine and appreciate the efforts of our talented students.

We wish you all the best in your academic pursuits and creative endeavors.



DR. SANJAY KUMAR Chairperson and Faculty In Charge, Literati: The Literary Committee, NIT Raipur



Dr. Ebha Koley Member



•FACULTY SUPPORT•

Dr. Anoop Tiwari Member



Dr. Saikat Majumder Member



Dr. Yeddu Vijaya Babu Member





iterati is pleased to welcome you to the latest issue of Shilpi Magazine, published by NIT Raipur. As we begin a new year, we enter a new age of creativity and entrepreneurship. This issue of Shilpi Magazine seeks to capture the entrepreneurial spirit by providing stories and features that will inspire, inform, and entertain you.

This edition's theme is "Entrepreneurship." Entrepreneurship is essential for economic growth and development because it is the backbone of any economy. The COVID-19 epidemic has impacted the world economy significantly, and entrepreneurship is emerging as a crucial driver of growth and recovery. This issue includes articles on various elements of entrepreneurship. We have something for everyone, from the hurdles of beginning a firm to the value of innovation and creativity in entrepreneurship.

As we begin a new academic year, we do so with more hope and enthusiasm than ever before. The past few years have been difficult for all of us, but we have shown resilience and adaptability in the face of adversity. We are proud of our students and faculty members who have worked tirelessly to ensure that our academic programs remain of the highest quality, even in the midst of a pandemic.

We have every reason to be optimistic as we look forward to the future. The world is changing quickly, and we are well-positioned to address the upcoming challenges and possibilities. We have a talented and passionate community of students, teachers, and staff that are committed to excellence and innovation. We are confident that with hard work and tenacity, we will overcome any hurdle and achieve great success. Thus, with optimism and joy, let us embrace the future and continue to make NIT Raipur and the world a better place through our creativity, innovation, and hard work. Together, we can build a brighter and more prosperous future for all.

Thank you, and enjoy reading!

-Editors of Shilpi



AT NIT RAIPUR

Foundation Day Celebration

01st Dec. 2022

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ational Institute of Technology (NIT) Raipur celebrated its Foundation Day on 1st December 2022. Mr. Hemant Verma, Chairperson, Chhattisgarh State Electricity Regulatory Commission was the Chief Guest of the event.

The celebration began with the welcoming of guests and dignitaries and the lighting of the lamp accompanied by a song praising the goddess. Dr. P. Y. Dhekne, Dean (Student & Faculty Welfare), offered a warm welcome to the attendees with his speech. He talked about how the classes during COVID were taken in online mode so that students don't suffer any loss, and all the required material was provided in the form of soft copies and through electronic media. FDPs were also organized in online as well as offline modes. A. P. J. Abdul Kalam Hall, new classrooms, and two 6-story apartments were constructed. Multiple

research papers were published on outstanding platforms, Vision 2030 was launched, showcasing the institute's plan and determination moving forward. He then thanked all the guests for gracing the event with their presence.

Moving ahead, a documentary featuring the legacy of the institute, its impeccable placement and PPO records, and the various achievements of the students, faculties, and alumni were also presented.

Later, Dr. (Mrs.) A. B. Soni, Director (I/C), NIT Raipur talked about how the institute is maintaining a steady momentum in growth in all aspects following Vision 2030, the implementation of NEP 2020, motivating the students with virtues, and their all-around development. She also elaborated on Institute using its resources and knowledge to develop

rural areas, in line with Unnat Bharat Abhiyan, providing entrepreneurship knowledge and exposure, and supporting other institutes by sharing resources and participating in Ek Bharat Shrestha Bharat by collaborating with various other NITs. She appreciated the stakeholder, especially the alumni association for consistently supporting the institute and expressed her sincere gratitude to the Chief Guest.

Next, Mr. Hemant Verma, an alumnus of NIT Raipur then presided over the podium and expressed his gratitude for being invited as the Chief Guest. He shared his experience of being a student of NIT Raipur and highlighted that it is the 18th year of the institute since it was granted the status of an institute of national importance, and how much NIT Raipur has progressed and achieved. He mentioned that many alumni of NIT Raipur have been appointed to top posts worldwide. The institute played a vital role in incorporating crucial skills. He wished the institute to do well in the future and ended his speech by quoting- "An engineer is a person who applies knowledge of basic science for the betterment of society."

This was followed by the Awards Ceremony. The Best Department Award was awarded to the Department of Applied Geology. Dr. N. D. Londhe, HoD, Electrical Engineering secured the Best Faculty Award. The Best Researcher Award was bagged by Dr. G. P. Gupta, Association professor, Information Technology. The Young achiever alumnus award was given to Mr. Abhinav Dewangan and the Distinguished Alumnus award was awarded to Dr. G. R. Sinha.

Next on the schedule were the cultural performances by Raaga - The Music Club of NIT Raipur, and Nrityam - The Dance Club of NIT Raipur. The celebration ended with a vote of thanks by Dr. Shrish Verma, Dean (Academics). Dr. Arif Khan, Registrar, Dr. Prabhat Diwan, Dean (Research & Consultancy), and Dr. R. K. Tripathi, Dean (Planning & Development) were also present during the event.

-Public & Media Relations Cell





ational Institute of Technology (NIT) Raipur celebrated the 76th Independence Day of India on 15th August 2022. Dr. A. M. Rawani, Director accompanied by staff members, unfurled the tricolour followed by the National Anthem. He gave a speech in the E-Hall to intensify the patriotic feeling for our country.

He recalled the various programmes organized by NIT Raipur on the auspicious occasion of 'Azadi Ka Amrit Mohotsav' such as India freedom run 2.0, Suryanamaskar program and online workshop by Architecture department. He explained about the five pillars of 'Azadi ka Amrit Mohotsav' which include Gati shakti under Action at 75, Achievements at 75 etc. He also appreciated NIT Raipur's performance saying that our Institute has been recognized as the 'Green Champion' of Raipur district by the Mahatma Gandhi National

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Council of Rural Education and was also awarded with Shiksha Samman by the Governor of Chhattisgarh. Then he spoke about the awareness spread by the Institute regarding NEP 2020 and the various online workshops and brainstorming sessions that were conducted under it. A committee to oversee the proper implementation of NEP has also been formed. He informed the audience about the progress in score of NIT Raipur from 210 in 2021 to 215.22 in 2022 given by NIRF Ranking which is an absolute increase in our performance. He also talked about other initiatives take by the institute recently, NIT Raipur had organized research scholar conclave in which 225 students participated out of which 5 got the 'Best Presentation Award'. He recognized the Aashirvad Club which was formed by the women of NIT Raipur which contributes to social work.

At the end of his address, he urged all the





members of NIT Raipur to unite and work on a single point agenda to promote the Institute and participate in its development.

Keeping in mind the diverse heritage of India, a cultural program was organised by the sanskriti, the cultural committee, following the speech. Students from various clubs and committees, like Nrityam - the dance club and Raaga - the music club, as well as individual performers showcased their skills in this event and made the morning even more enjoyable for the people present.

-Public & Media Relations Cell



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### Chemical Engineer's Association of NIT Raipur (CHEANIT)



HEANIT is the Chemical Engineer's Association of NIT Raipur, headed and handled by the Department of Chemical Engineering. The Department is one of the oldest Disciplines adopted by the institution, established in 1962. The students who graduated from the Department are successfully and continuously working as Engineers, Scientists, Consultants, and Academicians in various organizations and pursuing higher studies in premier institutions in India and abroad. The Department aims for global recognition in teaching, research, and community services and raising the standard of Chemical Engineering education in the latest art of technology. The department's mission is to impart quality education in the field of Chemical Engineering to produce professionally competent engineers for the benefit of society at large. **CHEANIT** was formed with the vision of the overall development of the students of the Chemical department in curricular as well as extra-curricular activities.

Presently the association is managed by:

Head of Department: Dr. A.K. Poonia

Faculty Incharge: Dr. Chandrakant Thakur, Asst. Professor

### **1. MOCK INTERVIEW SESSION**

To give exposure and know the further opportunities in the field of Chemical Engineering, on 18, 19, and 20th October 2022, the Chemical association organized a mock interview to guide the upcoming students to face the real interviews, in which all doubts regarding the interview were solved. We greatly thank our Seniors who shared their tips and suggested us the right path. Under the guidance and Surveillance of the faculty in charge of Cheanit (Dr. Chandrakant Thakur sir), this mock interview became successful.

### 2. CHEMICAL SPORTS FEST

### "The difference between the impossible and possible lies in a person's determination".

With the beginning of the New Year, the Chemical Engineering association organized a sports event from 6th to 8th Jan 2023. After all academic sessions, CHEANIT organized an amazing, interactive event. In this fest, second, third, and fourth, M-tech and Ph.D. students came in front to show their talent. This sports fest included Cricket, Badminton, Volleyball, and tic-tac-toe. All games were successfully organized, and its main motive was to make a good link between juniors and seniors which was successfully done through Sports activities.





**CIVIL ENGINEERING ASSOCIATION** Department of Civil Engineering NIT-Raipur, Chhattisgarh, India

## **Civil Engineering Association (CEA)**



The Civil Engineering Association (CEA) is a prominent student-led organisation that comprises students, scholars, and faculty members of the Civil Engineering department at Nit Raipur. Its primary objective is to introduce aspiring civil engineers to the practical challenges of the profession and to foster a passion for engineering. Throughout the year, CEA conducts various activities such as workshops, professional events, sports events, social campaigns, and talks by renowned personalities to promote the holistic development of students. By encouraging students to celebrate the "joy of engineering," CEA aims to inspire the next generation of civil engineers and prepare them for a fulfilling career.

he professor in charge of CEA and HOD have a shared vision of taking the Civil Engineering department to new heights. Their leadership and guidance have been instrumental in promoting academic excellence, professional development, and collaborations with industry partners, providing opportunities for students to develop as well-rounded individuals. Their efforts have set the foundation for a bright future for the department.

### **Essay Writing Competition:**

The Civil Engineering Association (CEA) recently conducted an essay writing competition. The competition aimed to promote awareness and encourage discourse on the challenges facing the construction sector in India and the potential solutions.

The essay writing competition was open to students pursuing undergraduate or postgraduate courses in engineering. The participants were required to submit an original essay of up to 3000 words on the given topic.

The essays were judged on various parameters such as relevance to the topic, originality of ideas, research and analysis, coherence and clarity of thought, and language and presentation skills.

The winners of the competition were awarded prizes and certificates of merit. The winning essays were also published in the CEA's magazine, providing a platform for their ideas and insights to be shared with a wider audience.

The essay competition was an important initiative by the CEA to engage and involves young minds in discussions about the challenges faced by the power sector. It provides an opportunity for students to express their ideas and opinions on issues of national importance and to contribute to the discourse on policy and governance.

### **Quiz Competition:**

The Civil Engineering Association recently organized a quiz competition for students pursuing civil engineering courses. The objective of the quiz competition was to promote a spirit of healthy competition among students and enhance their knowledge and understanding of various civil engineering concepts.

The quiz competition comprised two rounds, including multiple-choice questions and rapid-fire rounds. The questions were designed to cover a wide range of topics, including construction materials, structural engineering, geotechnical engineering, transportation engineering, and environmental engineering.

The competition was open to students from various colleges and universities across the region, and several people participated in the event. They were judged based on their accuracy and speed.

The winning team was awarded a prize and a certificate of merit, while the runners-up also received certificates of appreciation. The quiz competition provided a platform for students to showcase their knowledge and skills in civil engineering and encouraged them to continue their pursuit of excellence in the field.

### Session on "Aditya Birla Group Engineering Leadership Programs"

The session on "Aditya Birla Group Engineering Leadership Programs" was aimed at providing engineering students with insights into the leadership programs offered by the Aditya Birla Group. The session covered topics such as program objectives, eligibility, the application process, and the selection procedure. Participants can also learn about specific programs offered in different industries and career growth opportunities. The session also covered general topics related to engineering leadership, such as key skills and qualities required for effective leadership and challenges facing engineering leaders. Overall, the session offered an excellent opportunity for students to learn about career paths and gain insights into leadership roles in the engineering field.

### Session on "The most recent features of Structural-Wind load generation for building structures in STAAD Pro as per IS 875(part-3):2015.By – Gaurav C (User success manager-South Asia)

The session on "The most recent features of Structural-Wind load generation for building structures in STAAD Pro as per IS 875(part-3): 2015" was an informative session aimed at providing civil engineering students and professionals with insights into the latest developments in wind load generation for building structures using STAAD Pro software as per Indian Standards IS 875(part-3): 2015.

The session covered a range of topics related to wind load generation, such as the importance of wind load analysis for building design, the key provisions of IS 875(part-3): 2015 related to wind loads, and the features of STAAD Pro software that can be used to generate wind loads for building structures.

The session also included demonstrations of wind load generation using STAAD Pro software and examples of how wind loads impact building design. Participants may also learn about the best practices for wind load analysis, such as selecting appropriate wind load models and applying load factors.



National Institute of Technology Raipur

he institute was established as Government College of Mining and Metallurgy on 1 May-1956. Then the Department of Mathematics came in existence. The department provides an outstanding research environment. The department offers academic program leading to the award of M. Sc. and Ph.D. degree. Apart from this, department taking care of mathematical input to all Undergraduate and Post-Graduate courses in Engineering and Computer Applications. Presently, in the department, there are ten regular faculties and four teaching assistants. The faculty takes research initiatives to work in recent and emerging areas of mathematics.







Dr. Tanvi Jain

Prof. Shiv Prasad Yadav Ms.

Ms. Aysha Parveen

## Invited talk conducted by Department of Mathematics:

As a part of the **"Institute Lecture Series"**, one lecture has been delivered by the expert **Dr. Tanvi Jain**, Indian Statistical Institute (ISI), Delhi on the title "A Journey from finite to infinite" dated on February 26, 2022.

The Department of Mathematics, has organized an invited expert talk by **Prof. Shiv Prasad Yadav** from the Indian Institute of Technology, Roorkee on the title "Data Envelopment Analysis (DEA)" on the dated July 25, 2022.

### Invited talk delivered by the faculty members:

 Dr. S. N. Raw has delivered invited talk on the topic "Mathematical Modelling" in the National Mathematical Day 2022 organized by Banalore Institute of Technology Bangalore, on December 22, 2022.

- **Dr. S K. Samanta** has delivered invited talk on "Advanced Optimization Theory" at Kalinga University, Raipur,, dated on June 23, 2022.
- Dr. A. K. Sharma has delivered a talk on "Non-parametric Statistical Data Science", organized by the Centre for DataScience (CDS), Siksha 'O' AnusandhanBhubaneswar on May 21, 2022.
- Dr. A K. Sinha has delivered invited talk on "Importance of rough Set Theory in Science and Engineering" at Kalinga University, Raipur, on February 9, 2022.
- Dr. N. K. Thakur has delivered expert talk in the AICTE-QIP on Implementation of Numerical Methods using MATLAB, at IIT Indore, duringJanuary03-08, 2022.

### **Projects in the Department:**

- One CGCOST project has been completed under PI **Dr. Arvind Kumar Sinha** on title "Fight against the corona virus pandemic using mathematical modeling under bioinformatics and surveillance" of amount Rs 1.25 Lacks.
- One SERB-DST project has been sanctioned under PI Dr. Sharada Nandan Raw on title "Time delay and disease effects on the dynamics and stability of the ecological systems: Mathematical Modelling, Controlling, Prediction, Application and Management" for the period of 21 February 2022 to 20 February 2025 of Amount Rs. 660000/-
- On Industrial project has been sanctioned under the supervision of **Dr. Deepmala Sharma** on the title "Growth demand and projection analysis of herbal products" for the period of 6th Dec. 2021 to 5th Dec. 2023 of amount Rs. 1,20,000/-

Six Ph. D. students have completed their Ph. D degree in the year 2022. Ph. D. student **Ms. Aysha Parveen** has received the **Best Paper Award** in an international conference "Optimization, Learning and Analytics in Business (OLAB-2022)", organized by the Department of Mathematics, Heritage Institute of Technology, Kolkata, India during 15-17 December, 2022.



# Electrical Engineering Association (EEA)

\*ICPC<sup>2</sup>T – 2022: Advancements in Power, Control, and Computing Technologies\*

he Department of Electrical Engineering, National Institute of Technology, Raipur, organized the Second International Conference on Power, Control and Computing Technologies, ICPC<sup>2</sup>T – 2022, from 1st to 3rd March 2022. The conference was held virtually and was co-sponsored by the IEEE Bombay Section and the IEEE Student Section NIT Raipur. For the first time, the conference was technically sponsored by the IEEE Industry Applications Society (IAS) in Chhattisgarh.

Dr. Narendra D. Londhe served as the General Chair of the conference, while Dr. EbhaKoley, Dr. S Patnaik, and Dr. S Jain were the organizing chairs. The conference received an overwhelming response with over 218 submissions from across the world, out of which 161 papers were selected by professors from various IITs, NITs, and other reputed institutions. The selected papers underwent rigorous scrutiny on various parameters before being accepted.

The three-day conference concluded on 3rd March 2022, with six keynote speeches and 17 technical

### Talk on PV technologies, issues in distribution network marks Day 2



sessions, which provided a platform for deliberation on the accepted papers. The conference proved to be a great success and provided a forum for researchers, academics, and professionals to exchange their ideas and insights on the latest advancements in power, control, and computing technologies.

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The conference not only fostered collaboration among the participants but also provided valuable insights and solutions to the challenges facing the industry. The success of the conference is a testament to the organizers' commitment and dedication to promoting innovation and advancing research in the field of power, control, and computing technologies.

### \*EEA Connect: An Interactive Teacher-Student Event\*

The Electrical Engineering Association (EEA) successfully celebrated Teacher's Day on 5th September 2022, with an aim to promote studentteacher interactions after the pandemic. The program began with a Guru Vandana paying tribute to all gurus and teachers, followed by an introduction to EEA and its functioning. Then, the former Head of Department (HOD) of the Electrical Engineering department, Mr. ND Londhe, shared his blessings and enlightened everyone with his words. Anchors conveyed gratitude to all teachers and staff members. The event included a music performance, a game where faculty shared their experiences, and a dance performance, with the program ending with thanks to the faculty, EEA members, and faculty in-charges for their support in making the event a success.

#### **\*EEA INAUGURATION ON ENGINEERS DAY\***

On September 15th, 2022, the Electrical Engineering Association (EEA) was officially inaugurated in an offline event organised to commemorate Engineers Day. The event was significant as it marked the revival of the EEA after a hiatus.

The Bharat Ratna laureate, Sir Mokshagundam Visvesvaraya, was honoured at the beginning of the ceremony by having a lamp lit in his honor. After this, Dr. Narendra Londhe, the head of the department, showered his blessings on everyone and motivated them with his enlightening words. He spoke about the importance of engineering in society and how engineers have contributed to the advancement of technology and infrastructure. Associate Professor Subhojit Ghosh also emphasised the significance of practical knowledge and how it can be beneficial for future professional endeavors.

The event also included cultural activities such as music and dance performances, adding to the celebratory spirit of Engineers Day. Additionally, recorded videos of alumni who are currently working or studying in different places were screened, providing valuable insights into the profession. The event was finally wound up with a vote of thanks by Venu Sonti Sir.

Overall, the event was a great opportunity for students to learn about the significance of engineering, interact with alumni, and celebrate Engineers Day in a fun and interactive way.

\*Future Electrical Engineers attend informative **IOT session\*** 



A session on the topic of "Internet of Things in Electrical Engineering" was organized by the Electrical Engineering Association (EEA) at NIT Raipur on January 19th, 2023. The guest speaker for the session was Dr. Malaya RanjanKhare, a renowned member of the IEEE with over 15 patents in instrumentation and communication. Dr. Khare shared his vast experience of working with reputed institutes across the world and his international academic exposure in the field of IoT. The session covered the importance of IoT in today's world and its potential to provide solutions to everyday problems. IoT enables companies to automate processes and reduce labor costs, making it an essential technology for businesses. Dr. Khare shared several examples of IoT applications, including smart metering, building automation, smart grid, and connected public lighting.





## ANNUAL REPORT by MEA 2022-23

**1. PRASHIKSHAN (5th NOV. 2022)** An offline session was organized by Team MEA for the students in the third-semester Mechanical Engineering department under the guidance of Dr. Suraj Kumar Mukti sir, Prof. In-charge (MEA). This informational session aimed to facilitate the students' opportunities in the core field. The guest speaker was Yogesh Pratap Singh sir, IISC BANGLORE (NIT RAIPUR - Alumni). The session was based on the research opportunities available for students in India and abroad. The session came to an end with a talk on projects and a warm greeting.

2. INDUCTION PROGRAMME OF FRESHERS (2022-2026) (22nd NOV. 2022) Team MEA hosted an induction program for the students who are admitted to Mechanical Engineering Department in the year 2022. The program was hosted in the presence of the Head of the Department, faculty members, and lab technicians. The chairperson and the president of MEA were also present. The students received satisfactory knowledge about the future prospects of Mechanical Engineering. The program was brought to an end by a visit to the laboratories of the Mechanical Engineering Department.

**3. SPACE IN INDIA: ORIGIN AND EXPANSION OF ISRO (16th DEC. 2022)** On the 16th of December, 2022, Dr. Alok Srivastava, an outstanding scientist from ISRO came to our college and enlightened us with the various aspects of the infinite space, and the prestigious space and research organization of our country, ISRO.

**4. INDUSTRIAL VISIT TO NECO INDUSTRIES (14th FEB. 2023)** On the 14th of February, 2023, a special industrial visit was planned for the fourth-semester mechanical engineering students, along with respected faculty members, and some seniors from MEA. The visit was very educational and helped the students to develop a deep understanding of the actual manufacturing processes.

# A Holistic View of the Nation's Development through IITs and NITs

IITs proved to the world the capability of India in the domains of education and technology. In more than one way, the story of the IITs is the story of Independent India. The IITs have contributed immensely to India's improved standing on the global stage today." - Hon'ble President of India Smt Droupadi Murmu



SHARVARI DAMBHE BioTechnology 2nd Year

n today's society, centrally funded institutions such as IITs, NITs, and IISc play a crucial role in the development of every sector of the nation. The ability to conduct research and analyze problems opens doors to new modes of thinking, learning, and knowledge. A newspaper, released by the Banaras Hindu University researchers, has shown that centrally-funded institutions were responsible for more than 70 percent of research in India from 2016 to 2020. The IITs, with 15.86%, had the highest share of research publications, followed by the Council of Scientific and Industrial Research (CSIR), with 10.32 percent, and central universities with 10.12 percent. Moreover, IITs and NITs (4.78%) together contributed to more than 20 percent of the research done in India.

One of the recent examples of IIT contributing to the nation is its contribution seen during the initial phase of the pandemic. Rising to the challenge of containing the virus, IIT Delhi initiated important research and development projects. It designed and developed rapid antigen test kits, PPEs, antimicrobial fabrics, high-efficiency face masks and low-cost ventilators, among other things.

These institutions have produced brilliant and curious minds such as Narayana Murthy (IIT Kanpur, Co-Founder of Infosys), Sachin Bansal and Binny Bansal (IIT Delhi, founders of Flipkart), Rohit Bansal (IIT Delhi, Co-Founder of Snapdeal) that have all succeeded in their endeavours. Natarajan Chandrasekharan (NIT Tiruchirappalli, Chairman of Tata Sons, Tata motors and Tata beverages) and Sundar Pichai (IIT Kharagpur, CEO of Google and Alphabet) are among the top businessmen in the world.

As these central institutions have built a nation that delivers innovative solutions to the world, they have left no stone unturned by imparting knowledge, providing platforms for showcasing ideas, exposing students to world-class training, and hand-holding them as they chart new paths. India has been well served by these reputed educational institutions as it aspires to reach the Amrit Kaal and become a leading global player.

# Feminism - The rise of women is not about the fall of men

or centuries, we have created societyapproved job descriptions for men and women. If either does something different from their society-approved roles, it is always seen as unconventional. We will never achieve economic progress if women are not included in critical economic activities in our country. particularly in less developed countries. When I was in high school, one of my best friends, wanted to join the Indian armed services, but our teacher advised her that the environment in the armed forces was not suited for a girl, so she was forced to pursue biology instead. Imagine having a desire and having it stolen away from you solely on the basis of your gender, solely on the basis of who you are rather than what you are capable of. The education system had failed her that day, and society had failed her. Female literacy rates have always been lower than the male literacy rates in India.





PERI PRATHAM 6th Sem. Biomedical Engineering

Female labour participation rates have also steadily ceclined. Women continue to do most of the unpaid work that helps prop up economies. Women raise children, cook, tend to the old and sickly.

We all have already heard that including women in the workforce increases productivity. A greater workforce will have a significant impact on economic output, and there should be a corresponding increase in GDP. However, the advantages go much beyond this crude appraisal. In the United States, for example, one study found that "for every 10% increase in women working, we find a 5% increase in salaries." That is, not only will you see an increase in actual economic activity as a whole, but you will also see an increase in men's earnings.

Companies gain tremendously from expanding women's employment and leadership options, which has been proved to benefit organizational productivity and growth. Companies with three or more women in top management positions are thought to perform better in all aspects of the firm.

Another problem is that India hasn't produced enough jobs to accommodate the growing number of educated women. Even when they do, women must manage the balancing act of caring for their families while still working. Meanwhile, in the informal sector, women are frequently forced to work in low-paying jobs. And, while they do it to make a living, the working conditions are often deplorable.

It's not a competition. If person A gets a raise at work and person B works equally as hard as them, then person B is also entitled to a raise. Unpaid care and domestic duties take up 2.5 times as much time for women as it does for males. When we start differentiating two people based on who they are, then the inequalities begin. But if we just look at their capabilities and experiences, we will be able to create unbiased opportunities for all genders.

Why are we continually advocating for the girl child's protection? Imagine having to fight for your basic right to life. Why should a girl child get a grave when a boy child gets air to breathe, milk to drink, and a roof over his head? A girl child can take care of her parents as well. She will be able to obtain an excellent education, find work, and support her family. This in no way diminishes the importance of the family's son. In fact, he will feel less obligated to meet all of his family's requirements, allowing him to focus on his own goals and ambitions.

A married woman faces even greater difficulties. She's being judged all the time. She is graded if she dresses in trendy workplace attire. She is judged if she works late. She is judged if she attends an office party. If she hasn't had a child within the first year of marriage.

Imagine a world where people tell a man that his shirt is too short, that he shouldn't drink so much, that he should go home earlier, and that he should always look after his wife. Doesn't make sense, does it? So, why is it acceptable for women to be asked these questions or to be judged in this manner? The truth is that we are constantly discussing how to safeguard women. Why not establish a safe environment for everyone so you don't have to protect women, and we won't be asking these judgmental questions when we see a woman arriving home late from work. Genderbased discrimination will vanish only when we recognise the genuine potential of an individual, not a man or a woman.



Well, there might not be a simple solution. However, we can make small efforts to ensure that women continue to participate in the workforce. Simple measures like men sharing home responsibilities, safer public transportation, improved working conditions, and enabling girls to pursue higher education all contribute to making this world more balanced.

These levels of equality do not take away anything from a man. It just creates an enabling environment for women to contribute to this planet as much as the men do bringing about greater prosperity and growth.



oday women share almost equal rights as men, and society has definitely come a long way when we compare the scenario from just a few centuries back. Women weren't allowed to vote, or study.

Instead, women were take care of children, h o u s e h o l d the men were

> the family's Slowly, a emerge, allowed as equal men, leading year, where only involved but also hold a

in the total



ANANYA DIXIT Semester - 8th, Information Technology

supposed to stay at home, and generally manage all responsibilities, while required to provide for needs financially. change started to women were education, as well voting rights as to the present women are not in equal education substantial place workforce.

This doesn't mean we have achieved all that there is to achieve when it comes to gender equality, there is still work left to bring women at an equal standing to that of men. And the efforts are just that, to bring both genders on equal standing, not one higher than the other. Often the efforts to bring women to an equal standing are seen as efforts to bring men down, when it is not so.

Feminism is not just for women, as it is often assumed. To be very precise, feminism is the political, social, personal, and economic equality of both genders. In fact, it has as much to do with equal rights for men as it has to do with women. Gender stereotyping

affects both genders. In females, it leads to discrimination when it comes to equal pay at work, because men are supposedly the more "capable" workforce or when it leads to the majority of childcare responsibilities being dumped on females because they have a nurturing nature, even though a father is as much a parent and as much responsible for childcare as a mother. In men, it leads to having absolutely none or minimal tools to address topics like sexual abuse, not to mention the heavy stigma that



comes with it. This leads to men often having to suppress their feelings, following the norm of having to be "masculine" and "strong". In men, it is also the disapproval that comes with choosing a career that was traditionally labeled as a "feminine" job. These are the greater effects at play, but we are greatly influenced in our everyday life by these social norms of what a gender can or cannot do, and what is required of a specific person based on their gender. And sometimes these norms are so micro, or so commonplace that we fail to even notice them, let alone take action against them. From the fashion choices of a person to the way he or she chooses to speak, everything is constantly judged according to whether it satisfies some set gender norms or not. The rise of women thus would do more good for men than people may care to accept. Not only when it comes to our everyday choices, but also in decisions that have a much larger impact on our lives, like having proper tools and procedures to address one's emotional needs instead of bottling them up. It will lead to a less stigmatized and more inclusive society, wherein your life choices aren't bound to just a gender. Where both men and women can take up any job or activity without disapproval or discrimination. This will not only lead to greater productivity and diversity of opinions but also lower stress levels in the workplace. For women, it means an equal stature as that of men, and for men, it means better management of responsibilities at home leading to a better overall life.

The rise of women is not the fall of men, far from it. It isn't about building a world where females have greater power. Not at all, because we for one know the effects of an imbalanced society. It most definitely is not a world where men have greater power. But instead, it is about building a world where each individual's voice matters just the same, where opinions are given value instead of the gender of the person who is speaking, where emotions are considered worthy regardless of the pronouns the person chooses to use. where power is not withheld just because the person bleeds once a month, where a person isn't supposed to be the sole breadwinner of the family just because he's a man, where roles and responsibilities, expression of creativity and emotions don't have a bound, where your abilities aren't judged by your gender, where people are strong because they are, and not because of the gender they were born as, where the glass of the world is free from the tainted red of gender roles that will still take years to wash.

We are born equals, we die as equals, what we want in between is continuity of the same to be equals.

'I do not wish women to have power over men; but over themselves.' - Mary Wollstonecraft

## THE RISE OF WOMEN IS NOT ABOUT THE FALL OF MEN

n today's world feminism and women empowerment are global movements. The social media is completely filled with demands of equality and a better social status for women. In this world, the rise of women is often associated with the fall of men. This essay goes into the depth of this opinion to look for a conclusion. This essay will be looking at this topic by dividing it into three cases.

Before beginning to discuss the first case, some facts collected from different surveys across the world are stated below.

- According to the recent report of UNICEF (United Nations Children's Fund), up to 50 million females are missing from the population dynamic of India because of systematic gender discrimination and female foeticide.
- According to a report published by The Times of India, approximately 40% of girls between ages 15-18 do not attend schools. Nearly twenty-three million girls drop out of school yearly because of lack of proper menstrual hygiene.

- Wage pay gap is an under-estimated problem across the world. In 2020, the women of USA earned only 84% of what their male counterparts earned.
- Women are a daily victim of crimes such as domestic violence, sexual assaults and rapes. One in every three women have faced some kind of sexual assault in their lifetime.

The above-mentioned scenarios are just a window to the struggles and challenges that women face every day of their life. These facts are a proof of how women are devoid of right to life, right to education, right to justice and the right to have a voice. Women empowerment focuses on providing these rights to every woman. In this case, men and women are independent entities; the Venn diagram being two non-intersecting circles. Men always had these rights; the aim is to include women in that scenario and that doesn't affect or degrade the rights of any man.

The second case looks at the above-mentioned issues faced by women in the light of misogyny and toxic patriarchy. Denouncing women of their



SHREYA TIWARI CSE, 8th Semester

deserved rights has given an unfair advantage to men. In patriarchy where the head of the family is considered to be male, men have started exercising this title to control and direct the life of women around them. The higher pay and higher societal status

have provided men with an entitlement resulting in exploitation of women. This has also created gender roles in which women are expected to do the role of a housekeeper, a wife and a mother and men are expected to only earn for their family.

Imagine a balance, with one side heavier and the other lighter. If it is to be balanced, some weight has to be removed from the heavier side and needs to be kept on the lighter side. This has to be done until both the sides are equally balanced. Now consider this balance to be the balance of men and women, the heavier side being women who are below their status because of the burden imposed on them and the lighter side being men who are above their status because of the responsibilities that instead of sharing are passed on to women only. Rise of women, aims to raise the women to equality and in doing so some of the weight needs to be shifted from women to men as well. In this way the burden of complete household, family and honor will be shared between men and women. And when that is done, when the weight is divided equally among the two, there is a rise in heavier side and a fall in the lighter one, just for a moment before they are balanced.

The fall that comes with the rise of women is not the fall of men, but the fall of entitlement in men. The fall of their control over women's life, the fall of gender roles, the fall of sexism in society and the fall of privileges. Only after the fall of these, can men and women reach an equal status.

Before discussing the third case some more facts are mentioned below:

- Approximately 76% of suicides in the world are by men and suicide is the biggest cause of death in men below thirty years.
- Men are more likely to get undetected mental health disorders, alcohol dependencies and drug usage.
- Men are less likely to access psychological therapies than women.

The above-mentioned facts lead us to a conclusion that with women being declined of their rights, men aren't getting a better place either. Women being suppressed is also making men pretend and act in a certain defined way. 'Man up' being used to silence every weep and cry of little boys, and strength and inflexibility only are considered to be the traits of proper masculinity. If women are given space for being stronger and bolder, it is also making space for men to become softer and gentler. This is breaking gender stereotypes and is allowing men to become whatever they want to and however they want to. In this perception, the rise of women is the rise of men as well.

It can be concluded from the three discussed cases that the rise of women is only bringing down the ill prejudices and traditions of the society and is instead bringing the concept of equality and equal status on the table. Rise of women is clearly the rise of the complete society, and that can never be the reason of fall for anyone.

I think the day we stop thinking us or others as a man/woman while following our goals. that's the day we can really rise up to equality.



## Is The Modern Woman Inclined Towards Motherhood?

ver the course of history, women have always been expected to be mothers and were trained for that from a young age. Girls were raised with the intention that one day they will become a good wife to their husband and a good mother to a son, as the idea of

motherhood in most countries has always revolved around bearing a male child. Thus, the identity of a woman was confined within these roles and she was expected to serve and even sacrifice her well-being for

the sake of her family. Guided by patriarchy and the over glorification of motherhood, the plight of mothers and the extreme risks involving pregnancy were ignored and disregarded by the society as having children was seen as naturally the ultimate goal of a woman's life. The women who were unable to have children due to some reasons were shamed, persecuted and pitied for their "lack". The mothers then and now are still ostracised and judged if the society thinks she is not giving her whole self up for her children. But the difference today is that because of centuries of feminist movements for women's rights and enforcement of laws for the empowerment of women, the women in the present era finally have the means to be independent which in turns allows them to have a choice on whether to have children or not.

Before answering whether the modern woman is inclined towards motherhood or not, it's

PURVI GHIDORA Semester: 6, Electronics and Communication Engineering

necessary to first discuss the psyche of women and what they go through during the process of childbirth and its lasting

consequences on a woman's health and personal freedom. It's evident that more often than not the traditional gender roles have forced women to stay at home and have served as a propaganda to keep them in control of the men around her. For a long time, women were not allowed to work and seek personal life goals. However, the modern woman possesses a choice to either follow the traditional path of being a stay-at-home mom, a working mother or to not have any children at all. All of these options are valid and should be respected because all women are different and no generalisation can be made on what the modern woman tends to choose.

There has certainly been a rise in women who are opting to not have children. There are many legit and well thought out reasons for this including the desire to simply not have any. The women who do decide to have kids are likely to face many difficulties during the whole process. It is evident from surveys and several researches that women

have to adjust and compromise way more than men for their family. They have to endure immense physical and mental pain throughout the pregnancy and even after the birth. Their career is interrupted to meet the needs of their children which often have strong and lasting financial consequences. Most married working mothers are still fundamentally responsible for taking care of the child and household with the added biological responsibilities of pregnancy and breastfeeding. This overload of work lead to increase in stress which leads to the risk of diseases like diabetes, blood pressure, and mental health issues like depression and anxiety. It is clear that more responsibility falls on the mother's shoulders. Childbirth, itself, is a grave health risk for far too many women. The fact that a woman can potentially die during childbirth, especially in the developing countries is almost never openly talked about. Despite everything, it's still common to view parenting as a moral compulsion, to such an extent that voluntarily childfree people are

viewed with anger and disgust. Especially in India, it is almost considered unrealistic for a woman to have a family and a work-life side by side.

Women are, no doubt, still choosing to be mothers but on their own terms and with the new found freedom they are able to raise kids in better conditions both financially and emotionally. There is no evidence to suggest that the modern women disregard being a mother because of high education, job opportunities and freedom of today's world. She simply has resources to become more informed on this subject and understands her rights. She is more secure than ever and doesn't feel obligated to follow the society and knows better than to give in to the expectations of her family. If she wants, she can have both a family and a career and live life the way she wants. And if not, she can still live her life to the fullest without having kids. Single mothers are also becoming a common phenomenon as women are choosing themselves over abusive marriages and forced motherhood.

It also important to note that the modern women, that is the women of this decade, also include women from marginalised communities who still face heavy discrimination and due to lack of resources and education still do not have the choice to make independent decisions. They still follow the age-old tradition of marrying according to their father's choice and keep bearing children until they give birth to a boy. We often forget that, especially in India, there is not one image of a modern woman. Hence there is no black and white answer to the question whether the modern woman is inclined towards motherhood or not. It depends entirely on the woman. It can only be said that there has definitely been an increase in women's personal freedom to live life according to their will which includes the freedom to have or not have children and still feel complete. We can only hope that more and more women get the opportunity to have this choice one day.

### ENGLISH POEMS



SUMONA SARKAR 6th sem., Information technology

Who were you?

A colourless animal soaked in worldly pity, Where its face hides behind the cacophonous city. A fragile flower that ends the day with wretchedness,

Yet getting a void concern and a shelter of nullness.

Or a creature with a monotonous sin, To which this sphere claims zero wins.

But still, you evolve, you recreate, You make your definitions so innate. You break the prison of loads to create your own delicacy, To colour your wings and fly high in ecstasy.

You attract this world, Oh girl! you're no commoner.

Who rises in the fields being your own gardener.

Shilpi / 2023 / 27

### **ENGLISH POEMS** •

Why do I write? Many ask me. You'd know if you ever read along The lines and between them in my poem. You'd know when your eyes pace along The letters craving for more. You'd know when you hum along, With my heart's voice, I tuned it. You'd know when you lose track of time, Imagining the most beautiful fairytale ever with me. You'd know when your heart wrenches For the character's tears, it's an emotion for you now. You'd know when your heart races Every time you turn the page. You'd know when you see, My purest intentions in it. As a smile curls up on your lips, Turning them into a crescent moon, As your eyes lay on the last line, And we complete our story, The memories and the secrets And the joy the heart knows, are all sealed forever.



Here I am, again knocking on the thoughts, Walking down memory lane. "Ouch", I say as I stumbled upon a block, I continue walking as she didn't teach me how to stop. With courage, she gave, to defeat that block once, Oh, her? She's a goddess, my goddess... "Why?", you ask. Cause she's the only one who returned my prayers, See there, I can still see her getting excited when I first called her maa. Oh, how beautiful she looks when she smiles, No regrets even if I trade the world for it. She's my first love, who taught me how to love the world, Yet here I'm scared if I can love her enough, Enough to heal the scars of her sacrifice. One day I'll ask as I hug her, humming her favourite song, "Should I pluck stars and the moon?" Only to see her beautiful smile again, This time from through her heartbeats...





HEMASRI KOTA 3rd year, Biomedical eng.

### **ENGLISH POEMS**





LAKSHMAN MULCHANDANI 6th Semester Electrical Engineering

Came to college with nerves, excitement held tight, Met new faces, yet old friends out of sight.

Hostel life, nights spent awake in the dorm, Till 3 a.m. talking, feeling happy, no more forlorn.

Kota food, hostelers laughing over plates, Memories to cherish, to reminisce on dates.

Ram Mandir, visited with my best friend by my side, Every moment spent with her was a joyride.

Garba night, traditional day, attire to adore, Clicked pictures, danced in circles, our spirits soared.

Exams, the fear that made us all quake, Passing was joy, more than we could take.

The online world turned offline, friends lost, Yet new ones came, easing the pain and cost.

Philosophy of life learned along the way, Spirituality, a beacon to guide me every day.

This journey has just begun, more memories to make each day, Life is full of surprises, and adventure is here to stay.

As long as we hold onto our dreams and believe, The possibilities are endless, and in life we can achieve.

### **ENGLISH POEMS**



BHAVESH GAYAKWA BME 2nd Year



My father is a simple teacher, he isn't a hero to the world. But for the love he gave me & the lessons he taught, he is no less than a superhero in my world.

When I was a baby, he would hold me in his arms. I can still feel his love and tenderness which used to keep me safe from every harm.

By holding my little fingers, he taught me how to walk, and then how to talk.

He even taught me how to use a pencil and chalk. He taught me to differentiate the right from the wrong, so that in

Now that I have grown up, all my aspirations are converted into his dreams.

He cuts all his needs, so that I can fulfil my dreams.

The list of his dreams is incomplete but my every wish is on his wishlist.

I always wonder how a person who can love me so much could ever exist.

Now, I am ready to leave his place.

all situations I will stand strong.

And he knows it is just the beginning of the race, for the dreams that I have always wanted to chase.

I always think that in the story of my life, who is the lead that I will follow.

Every time I get the same answer, it will be my father, my superhero.

I could not tell you enough about him in a couple of minutes. Because I love him more than words and words don't have any limits!

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### ENGLISH POEMS •



ADYA JHA 6th sem, Cse



All dressed up to turn into a knight in white, Sleepwalking in the lonely deep dead night. Thanks faith for being such a perfect guide, My stars shine bright in the swathes of light.

The fate that now sparkles was not always so, It was sans identity, sans an unremitting glow. The blood on my hand was busy crying blood, Gate-crashing tender dreams with a silent thud.

Luck tried manoeuvres to avoid fate-claw's grip, To save wary dreams from destiny's fatal whip. Ah! Only if our lives shined like fresh rainbows, A fluke's VIBGYOR constructing colossal shows.

No light dawned even when the night grew dark, There was no silver lining and no Noah's Ark. All seemed so fated under the new circumstance, Hard fate blows and bludgeoning of the chance.

But I remained strong with songs of my dream, As my brave heart refused to wince or scream. For I knew a world beyond the wrath and tears, The bravery of those dead and lives lost in fears.

The lives are so fake without horrors of thy fate, Does it matter how steep was climb to the gate? You kept assessing how much dead ones weighed, They were the only ones alive as they fought unafraid.

I have lived the punishments of fate's unseen scroll, Being master of my fate and the captain of my soul. The beauty in my failures and the struggle so scenic, Which taught me how to fight and rise like a phoenix.

### **ENGLISH POEMS**



KREETI SONI 1st year, Electrical Engineering



A silver spirit that walks the edge of the river each dawn, It embraces the moon even when it was long gone. It follows the morning star to somewhere in the last hint of darkness,

And gracefully fades into a world of bizarreness. It puts the curse of the night to sleep,

And awakens the gods of the morning.

The guardians of the sturdy mountains that penetrate through the clouds into the sky,

And voices of the river channelling into the ears of the passersby.

The very existence of mortality is brought about by this immortal entity,

Which plays the role of the intermediate between disruption and serenity.

Who am I, but a whisper in the wind, A fleeting thought, a moment's whim. Am I the sum of my past, my present, my dreams, Or just a reflection of the world as it seems? Am I the words I speak, the actions I take, Or the thoughts I hide, the secrets I make? Do I define myself, or do others define me, A puzzle incomplete, yet to be seen? I am the child of the universe, a star in the night, A journey uncharted, a path yet to be right. I am the sum of my experiences, my memories, my pain, A collection of moments, that make me whole again. I am the love I give, the kindness I share, The hope I inspire, the courage I bear. I am the laughter I spread, the tears I shed, The light that shines, long after I am dead. Who am I, but a mystery unsolved, A riddle unresolved, a story untold. I am the sum of all that I am, A creation unique, a one-of-a-kind gem.

JAPho am T



PRASAD DESHMUKH Civil 3rd Year

### **ENGLISH POEMS** •

# **THE DARK IN OUR SHADOWS**



Civil; 4th sem

Who is your great foe, O Karna, the giver? Who is it you wish, to death, deliver?

Speak not of Arjuna, he is a servant to his duty.

As are you.

Speak not of your fate, for all men must learn to live with it.

As shall you.

And speak not of Duryodhana's influence, Bad influence doesn't absolve one of their sins.

As it won't you.

Whom shall you fight then, O Karna, the giver? Whom shall you, to death, deliver?

When the Sun God, on his unstoppable march, nears the horizon, And you stand tall, spine erect, challenging destiny itself, Half your face in his luminescence, the other half unlit, What must we fight, O Karna, if not the darkness in our souls?

What must we rage against, if not our actions borne of rage? What must we pity, if not our pity towards others?

What must we ostracize, if not the ostracization of the varnas? And what must we hate, if not the hate that makes us lesser men?

So pick the legendary Vijaya, and fill your quiver of arrows, And wage war against the dark of our shadows, Breathe fire, and burn your demons to the ground, For true victory is, in the victory of the self found.

### **ENGLISH POEMS** •



JAYESH TRIPATHI 4th year, IT

Stillness

Stillness is not death, You have every right to rest. It's not a never-ending race, this life can happen at your own pace, So please take your time, breathe in the clouds, Take in the texture of the sky, Paint it onto your skin, And learn what it means to fly.

No more fighting, no more rushing, no more fear of freezing, Understand that this life already has meaning, In the stillness between thoughts and the tautness of a lake without rain,

Or moments of forever that no one has a right to claim.

And the same is true for your body, The never-ending pools of your cells, In the moments between here and there, there is a truth no one can sell. There is no market, no theorem to prove, You are already enough, your path is already a groove. There is no stuckness to change, no villain to blame, and no concept to reframe, You are simply here and that simply matters. In the stillness of this truth, I hope the illusions of your fears may

learn to shatter.

and the second

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#### HINDI POEMS



**ARPIT SHARMA** 1st Year **Civil Engineering** 

# मेरी यादें

इससे पहले हम रहते थे, पढते थे अपने गाँव में। निकले बाहर, गाँव छूटा न रहे पिता की छाँव में।

अब याद वो आता, कच्चा घर वो, भरी दोपहरी गाँव की, जिनपे खेला बचपन, गुजरा उन कच्ची पतली राहों की।

मैंने वहाँ पे समय बिताया, समय नें भेजा यहाँ मुझे, माँ की ममता, आचरण पिता का, रखा बताओ कहाँ मुझे।

भले ही वो दिन छूट गए, अब अकेले रहना सोना पड़ता है, पर बात पिता की याद है मुझे, कुछ पाने के लिये कुछ खोना पड़ता है।



हर लम्हे में तुम समाये, कंठ शम्भो–शम्भो गूनगूनाये।

विष का प्याला अमृत सा पीते, मृत्यू को हर पल तूम जीते।

भरम में अंग–अंग रमाकर. कैलाश पर तांडव नृत्य तुम करते।

माँ गंगा जटाओं में सहेजे, डमरू से शब्द सृजित करते।



हे महादेव, हे शिवशम्भो, दे दो मुझको शरण तुम्हारी, भय,पीड़ा,काम,मोह तूम हरलो हर पल में रम दो खुशियाँ प्यारी।

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2nd Year, MCA





आदियोगी तुम कहाँ हो ? तुम्हें ढूँढता मैं हर जगह हूँ, आँखें बंद कर तूमको पाया, इस जन्म को जीना सिखाया।

ब्रम्हांड कंपन कंपन करता, जब त्रिनेत्र का काल उत्सव होता।

सृष्टि कालों काल बदलती, पर महाकाल तुम क्षणभर ना बदलते। भावस्पन्धन जब जब है होता , अक्षियों का रण फूलों सा सजता।

### HINDI POEMS •



HUSITA PATEL 1st Year Civil Engineering



आकाश में उड़ते विमान को देख, लक्ष्य जिसने ठाना था। करनाल से अंतरिक्ष तक की धुन को जिसने पहचाना था। दुर्गा थी लक्ष्मी बाई थी या कोई अवतारी थी, कल्पनाओं से बढकर जिसने उडान तय कर डाली थी।

पिता थे जिसके बनारसी लाल चावला। माँ जिनकी संज्योती थी। नाम था जिसका कल्पना चावला, लड़की बड़ी श्हद निश्चयी थी। असफलता से जो न डरती थी, संकल्प मोहूँ ने दृढ़ कर डाली थी। हर परीक्षा में हुई पास थी, अब्बल नंबर साथी थी।

फिर क्या था मोंटू ने अपनी पहली–पहली उड़ान भरी, क्या तुम्हें पता है, इसके लिए कल्पना ने कितनी पीड़ा सही। सन सन्तानबे की वह घड़ी, इतिहास में लिखी गई, मोंटू ने देखा पृथ्वी को, हिंदुस्तान की मिट्टी भी तब गर्व से भर उठी।

दूसरी यात्रा में कल्पना एक दर्दनाक घटना की शिकार हुई, कोलंबिया अंतरिक्ष यान से जुड़ी आशाएं भी बिखर गईं। हाय ! हमारी कल्पना शून्य में विलीन हुई, आसमां की दीवानी आसमा मे कहीं खो गई।

पर सिखा गई, वो दिखा गई, जो सिख उसे सिखानी थी, सितारों से भी आगे जिसकी एक नई कहानी थी, तुझे न दुनिया भुलेगी,तू सबके ख्वाबों में घूमेंगी, तेरी यात्रा सदा–सदा के लिए, नई कल्पना के लिए सपने तटोलेगी।



## HINDI POEMS •



KHUSHI GUPTA 2nd Year MCA

अंजान शक्ते

अंजान रास्तें हैं सामने मेरे राजी हूं उन पर चलने को बेपरवाह मुसाफिर मैं। शायद वाकिफ हूं अंजाम से, या ये तजुर्बा तजुर्बा है जिंदगी का पता नही, कुछ खबर नहीं कोई धुन गुनगुनाते हुए कुछ कदम आगे बढ़ाते हुए जब कट जायेगा सफर, जब बीत जायेगी शाम, जब खत्म होगी चाय, तब पीछे छूटे रास्तों पर दिखेंगे पीछे छूटे हुए पल कुछ यादें, कुछ एहसास जो कभी दस्तक देंगे मेरे घर पर,

फिर धुंधली हो गई मेरी यादों को वो दस्तक किरण—सी मिल जायेगी जिसका दामन थाम कर, वो बीते लम्हें याद कर, है चलना फिर से आगे मुझे, एक और अजनबी रास्ते की ओर।

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#### **HINDI POEMS**



MEGHA RATHI 1st Year Electrical Engineering

# प्रतिबद्धता की उोर

उत्तरदायित्व से सराबोर आंखें, मक्खमल शय्या की नींद त्यागे, नए कल की आस लगाए, चित को चिंता की चिता ना बनाएं।

विश्वास की डोर श्वांसों से जोड़ते हुए, श्वांसों के लिए बंधन, ष्वंधनोंष् के लिए प्राण छोड़ते हुए।

वह प्राण राज जो स्वप्न पंछी में बसते हैं, श्वांस व श्वंधनश दोनों को तरसते हैं।

कभी लगे स्वतंत्र कर दूं बंधनों को बंधन से, कह दूं आजाद हो तुम, त्याग निस्वार्थ के संगम से।

पर अंतरात्मा जागकर फिर आंदोलन करती है, फिर परमार्थ को स्वतंत्रता से सर्वोपरि रखती है।



प्रत्येक क्षण परीक्षा चलती रहे कर्म, कार्य, कुटुम्ब हर क्षेत्र में योग्यता की साक्षी क्यूं फिर कागज के टूकड़े ?

पल पल केवल दौड़ का हिस्सा या किस्सा मैं बना जय पराजय का निर्णय फिर क्यूं दौड़ से बाहर बैठा गण करे?

श्रम, विराम, आराम, साधना, तप हर प्राणी करे कभी उदर की संतुष्टि हेतु कभी लोभ की पुष्टि हेतु सफल असफल की परिभाषा भिन्न क्यूं फिर गंतव्य से हर किसी का चरित्र तय करें ?





पहली बार मिला था उससे. फिर भी मैं क्यों रोया था। सीने से जब उसने लगाया. तो मैं प्यार से सोया था। मैं ही बस हूँ उसका दुलारा, RISHABH CHOUHAN सारे जग से हूँ उसको प्यारा, 4th Year **Mining Engineering** खुशी में मेरे खुश हो जाती, दुख में मेरे साथ आती। जब तक ठीक ना हो जाऊं मैं तड़पते हुए दर्द से, हाथ नहीं हटाती है वह तब तक मेरे सर से। ना कभी डांट ती है. ना कभी रुलाती है. मेरी एक मुस्कान की खातिर, वह जग से लड़ जाती है । कहने को तो बहुत सी बात है, जो वह कहना चाहती है. पर जब होती है अपनों से जंग, वह जानबूझकर हार जाती है । इतना सब कुछ सह कर भी, उसने कभी कुछ नहीं बोला । थे और भी बहुत रास्ते, पर उसने दामन ही खोला । शायद मैं उसे बता ना पाऊं कि मैं उसकी इज्ज.त करता हूँ । पर न जाने क्यों मैं उसको खोने से बहुत डरता हूँ । इसलिए मैं यह लिख रहा हूँ, सब कुछ उससे ही सीख रहा हूँ, मां तू ही तो है मेरी दुनिया... तेरे प्यार में सब कुछ झोंक दूंगा । खुद की जान न्योछावर कर के... तुझको मैं जग में रोक लूंगा ।

## HINDI POEMS •

शिक्षा



SAKSHI SHEKHAR 2nd Year Civil Engineering अंधकार को दूर कर जो प्रकाश फैला दे। बुझी हुई आस मे विश्वास जो जगा दे।। उसे मुमकिन बनाने की राह जो दिखा दे वो है शिक्षा।। हो जो कोई असभ्य, उसे सभ्यता का पाठ पढ़ा दे। अज्ञानी के मन में, जो ज्ञान का दीप जला दे।। हर दर्द की दवा जो बता दे.. वो है शिक्षा। वस्तु की सही उपयोगिता जो समझाए।। दुर्गम मार्ग को सरल जो बनाए। चकाचौंध और वास्तविकता में अन्तर जो दिखाए।। जो ना होगा शिक्षित समाज हमारा। मुश्किल हो जाएगा सबका गूजारा।। इसानियत और पशुता के बीच का अन्तर है शिक्षा। शाति, सुकून और खुशियों का जन्तर है शिक्षा।। भेदभाव, छुआछूत और अधविश्वास दूर भगाने का मन्तर है शिक्षा। जहाँ भी जली शिक्षा की चिंगारी, नकारात्मकता वहाँ से हारी।। जिस समाज में हों शिक्षित सभी नर–नारी। सफलता–समृद्धि खुद बने उनके पुजारी।। इसलिए आओ शिक्षा का महत्व समझे हम। आओ पूरे मानव समाज को शिक्षित करें हम।।

#### **HINDI POEMS**

# जिंदगी एक २१७०२



TOMENDRA SAHU 3rd Year Biotechnical Engineering जिंदगी एक सफर ही तो है, जो खुद के पैरों से न चल पाने से शुरु हुआ और खुद के पैरों पर न चल पाने में ही खत्म हो जाएगा।

अभी तो बचपन गुजरा है, जिम्मेदारियों का पिटारा लिए अभी जवानी आएगी। खुद के सावलो का जवाब ढूंढते–ढूंढते वो भी गुजर जाएगी।

बचपन में माँ के आंचल में सारे गम भुला देता था, सारे राज बयां कर सके वो भरोसा और वो सख्स इस जवानी में कहां से लाएगा।

देख जरा गौर से इस मतलबी दुनिया में, अक्सर सबको अपनों से ही हारा पाएगा।

जिम्मेदारियां थोड़ी और बढ़ेगी वक्त के साथ, और अकेला तु रह जाएगा।

जिंदगी तो एक सफर हैं साहब, ये सफर भी गुजर जाएगा।

आएगा तेरा बुढापा खुद को संभालना मुश्किल हो जाएगा।

जो अपने होने का नाटक करते थे, उनकी असली पहचान नजर आयेगा।

पर हार न मानना मेरे दोस्त, जिंदगी तो एक सुहाना सफर है, हंसते हंसाते गुजर जाएगा।

### HINDI POEMS •

# तुम ना चलती नहा कनो



VIJAY KUMAR 2nd Year Electrical Engineering

नदी के पानी की बहाव की तरह नहीं, मगर थोड़ा धीरे धीरे ही सही। तुम अपने पर भरोसा किया करो, तुम ना चलती रहा करो ।

राह चलते मुश्किल आएँगी बहुत, सबसे लड़ जाओगी तुम, मेरा विश्वास है ये सबूत, तुम अपनी तरफ से पुरी कोशिश किया करो, सुनो, तुम ना चलती रहा करो।।

जब अपनी मंजिल को पाने का सोचा ही है, जब संजो ही लिया है सपना अपना, तो उसे असलियत मे तब्दील करने मे जुट जाया करों, कि तूम न चलती रहा करो।

अभी तो बहुत कुछ पाना है जिंदगी में अभी कैसे थक सकती हो तुम, माना थकान हो गई होगी लंबा सफर है, मगर दोस्त, तुम ना रुका मत करो।

धीरे धीरे ही सही तुम न चलती रहा करो.....



# ChatGPT: AN ANGEL OF GOD OR THE DEVIL FROM THE FUTURE

"Forget artificial intelligence – in the brave new world of big data, it's artificial idiocy we should be looking out for."

—Tom Chatfield

know that before even reading this article, many of you may think, "I know what ChatGPT is and what it could do, so why even waste my precious time reading about that?" Or some of you



TANMOY GHOSH 1st year Mining Engineering

may be thinking, "Well, another boring Al-related article." For all of you thinking whatever about this article, believe me, reading this surely will be worth investing time for.

Firstly, for those who don't know anything about ChatGPT, it is a chatbot that h e l p s h u m a n s t o c o m m u n i c a t e w i t h machines. But it is not a

simple AI or Android-created ordinary chatbot, rather we could define it as an algorithm that can understand the context of the conversation, and using its huge database it creates comprehensive answers and makes us feel as if we are talking with a real person. Using re-generative machine learning and feedback received from the user it automatically upgrades its database and thus, its answers also get upgraded with time. It has created a storm among people that it may replace humans in jobs and eventually place the future of a generation in front of a question mark. Here I have tried to place my logical insight on this vast and controversial topic.

#### **Brief background**

Though the popularity of ChatGPT has grown recently, this concept is as old as the concept of AI. In 1964, at MIT Artificial Intelligence Laboratory, a group of scientists led by Joseph Weizenbaum created the first natural language processing computer program named ELIZA. Using "pattern matching" and substitution methodology, the program gives canned responses that make early users feel they are talking to someone who understands their input. But this program was limited by the scripts that were in the program. On 23rd November 1995, inspired by ELIZA, A.L.I.C.E. (Artificial Linguistic Internet Computer Entity), also referred to as Alice Bot, a natural processing chatterbot, was composed by Richard Wallace. The making of modern ChatGPT started in 2017 as a

research article named 'Attention Is All You Need' on the topic of neural networks. ChatGPT is a derivative of the GPT (Generative Pretrained *Transformer*) language model developed by OpenAI. It was the brainchild of Elon Musk and Sam Altman and was developed by the latter. The first version of GPT was released in 2018, and since then, it has been continually improved and expanded upon. ChatGPT was specifically released in 2020 as a smaller version of the original GPT model, fine-tuned for conversation and conversation-related tasks. It quickly became popular due to its ability to generate human-like responses in real-time, making it a valuable tool for customer service and other applications. The first GPT model was released in 2018, and since then, the architecture and training data have been continually improved, leading to the release of GPT-2 in 2019 and GPT-3 in 2020. OpenAI has continued to improve and refine ChatGPT, making it one of the world's most advanced and widely used language models. OpenAI has also created a new program called DALL-E, which can produce any type of painting as per your description.

#### **Usage and convenience**

ChatGPT is trained on a massive 570 GB of data and can generate human-like responses to a wide range of questions and prompts. ChatGPT has been trained using a generative transformer architecture and can perform various tasks such as text completion, translation, summarization, question answering with high accuracy, correcting grammar, summarising difficult text into simple concepts, converting movies into emojis, fixing bugs in python code, well the list could be even longer. With its cutting-edge natural language processing capabilities, ChatGPT has the ability to generate highly coherent and contextually appropriate responses, making it a valuable tool for a wide range of applications including customer service, content creation, and language research.

ChatGPT gets trained by itself by a process named Reinforcement Learning Human Feedback or in short, RLHF process.

You may think there are already personal chatting bots like Google, Alexa, Cortana, or Siri, which can search for something for you or do any ordered work like ordering food or booking an appointment as per your request. What is the point of creating another similar thing? Well, the truth is ChatGPT cannot even perform any dedicated work just for you (viz. Ordering food for you); but it could understand your feelings and can suggest what you should do in any particular situation, which is beyond the capability of any above-mentioned chatbots. An article in The Times wrote about it, "Stunningly lifelike conversational language system...World's first truly useful chatbot."

And the most interesting part is, it can turn stories into motion graphics with the help of AI which in the near future with the advancement of technology may be presented as a hologram. So, we can clearly see ChatGPT is going to bring a revolution in the near future in terms of productivity and sustainability, and for this very cause, many people think that their job and future are unsecured. Let us find out how much truth there is in this.

#### Is It a Threat?

We can easily observe that there is a long 'I can do' list of ChatGPT. With the ever-growing technological advancement of AI and machine learning its 'To Do' list is also getting longer day by day. This very thing is the cause of goosebumps for a lot of people but we should always remember it is the humans only who have created all these AI and our brains are capable of doing such things which are far beyond the reach of any computer or AI.

We can differentiate human skills as Hard skills and Soft skills. Hard skills are those which need a high IQ (Intelligence Quotient) level such as

Product Management, Data analysis, and coding which can be performed by observing certain algorithms. Humans involved in these jobs could be easily replaced by AI in the near future. Soft skills are the works that need more EQ (Emotional Quotient) rather than IQ. Innovative ideas, situational behaviour, leadership qualities, growth mindset, emotional intelligence, etc. can never be developed within an AI and thus we always need humans right there in the field.

To create a product on the assembly line we can always rely on machines more than humans because they are not humans, so theoretically, it is foolproof and could give 24X7 efficiency, which makes it much faster than human hands. But to create the blueprint of the product, we always need that innovative & creative mind. An AI can collect data from its vast sea of knowledge; it can process that data to analyse all statistical and important details and eventually also can create an article on a topic. But that story would be biased to data only, whereas sometimes we need to be more human rather than being on point; we need to understand human perception and sentiments at that point in time on that topic because being genuine does not always means being ethically correct also. And machines will never understand these delicate and exquisite thought processes of us. This is exactly where we need a blend of emotions with truth. As Mr. Angam Parashar has said,

"To show the right content with the right context to the right people at the right time...this is what AI can't do perfectly."

#### Conclusion

Summing up all of the discussions, we can say that there are definitely some fields where machines are going to replace humans; but this does not conclude that computers are going to snatch all the jobs in the future. Rather than negativity, we should see it as our life is going to be easier and we would get more time for creativity and free thoughts.

Al can stretch its boundaries far but there always will be a certain limit where the baton from machines has to be passed to humans. And with the symbiosis between computer and human brains together we can reach as high feats that we might never have thought to reach; by making innovation and thoughtfulness of humans as its fuel, Artificial Insemination can progress more and more in the future. There will always be a need for more and more manpower in the development of technology and our lifestyle, we just have to learn the right skills in the right way and implement our knowledge in the exact place where it is needed. So, to sum up, I would like to say we have to stop seeing the rise of AI as 'Computer vs Us' rather, we should see it as 'Computer and Us' and to make our Earth a better place, both hands are equally important.

"Some people worry that artificial intelligence will make us feel inferior, but then, anybody in his right mind should have an inferiority complex every time he looks at a flower."

—Alan Kay



# CRYPTOCURRENCIES

Cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology—a distributed ledger enforced by a disparate network of computers. A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation.

#### **Bitcoin**

Since the introduction of Bitcoin in 2009, which is



AANCHAL SHARMA 3rd year ECE

generally considered the first decentralized cryptocurrency, over 4,000 v a r i a t i o n s o f cryptocurrency have been created worldwide. Bitcoin itself has never been compromised to date, so the coins themselves and the Bitcoin alternatives are considered safe and s e c u r e. How e v e r, cryptocurrency exchanges

have been hacked and individuals' accounts have been compromised –resulting in hundreds of millions of dollars in cryptocurrency being stolen.

#### Ethereum

Ethereum is the second-largest cryptocurrency platform by market capitalization, behind Bitcoin. It is a decentralized open source blockchain

featuring smart contract functionality. Ether is the cryptocurrency generated by Ethereum miners as a reward for computations performed to secure the blockchain. Ethereum serves as the platform for over 260,000 different cryptocurrencies, including 47 of the top 100 cryptocurrencies by market capitalization.

There are four ways to protect your cryptocurrency investment and enhance security :

#### 1. Avoid Cryptocurrency Scams

There are currently over 1,000 Active Cryptocurrencies on the market, and many come and go each month. Some of these are nothing more than just an online Bitcoin scams used as a way to pilfer coins from unsuspecting investors. One of the common ways fraudsters scam cryptocurrency users is by advertising a new coin and building up interest. Next, they offer an initial coin offering (ICO). Before users notice something has gone wrong, the fraudsters have pocketed the cryptocurrencies, and the site and the coin have vanished. Because of these 12th Annual Taste of IT Conference - #TOIT18 Wednesday, November 14 Sinclair College Ponitz Center 444 W Third St, Dayton, OH 45402scams, a great deal of research should be done to find a currency with a solid background.

#### 2. Secure Crypto Wallets

When investing or applying cryptocurrencies for use, it is necessary to store cryptocurrencies in a secure wallet. Although there are hot wallets which are ideal for usability, hot wallets can be hacked. Cold wallets are the most secure. There are two types of cold storage wallets to choose from: paper and hardware. A paper wallet may be one of the simplest, but your keys are printed to paper, which is not the safest medium. The hardware wallet, which is much the same as a USB drive, is the more secure cold storage option.

#### 3. Cryptocurrency Exchange Theft

Cryptocurrency exchanges exist around the globe, though many of these are not the ideal places to leave your coins.

When looking at which cryptocurrency to invest in the chosen must be considered. Up until recently, Mt. Gox was the most well-known exchange to be hacked. Over \$450 million worth of Bitcoin was stolen from their Hot Wallet over a period of time. This shows how crucial it is to conduct due diligence on the exchange, and never leave your coins in any one exchange for any length of time.



# Emergence of India as the Next Largest MANUFACTURING HUB

hat comes to your mind when you think of manufacturing in India? A large population that can provide a cheap workforce, the Make In India Campaign, and high-quality finished goods? Or the unlawful and corrupt practices, unskilled labour, and bad infrastructure? If it is the latter, then your opinion may not be the same after you read this article.



PRAMIL KESARWANI 3rd Year ECE

As per Cushman & Wakefield's 2021 World Manufacturing Danger Index, India has overtaken the U.S. for the second spot in the most sought place for manufacturing, only behind China in the race. Even the CEO of the global bank HSBC, Noel Quinn, applauded India for unlocking its economy via a simpler tax structure and digitization. He recently praised the government for reducing bureaucratic formalities and adopting reforms such as the Goods and Services Tax (GST).

It has been 75 years since independence, and India is marching towards a brighter future at an astonishing speed. The new era has seen the shift of the Indian economy from being an agricultural-based economy to a service-based economy. The pandemic has brought to notice the harms of outsourcing production to a single nation. Many companies like Tesla, and Apple have already realized that

they can no longer depend only on China for their manufacturing, the reason being the massive disruption of their supply chain once the Chinese government announced a total shutdown of all the factories during the COVID-19 outbreak. It has been reported that Apple has already decided to establish a manufacturing unit for its latest iPhone, the iPhone 14, to make up 85% of the demands in India under the "Make In India" scheme and will only be importing the remaining 15% from outside. This would result in cheaper and more affordable iPhones in the country.

Soon the world, including India, will have 5G internet, with its auction being concluded on 1st August 2022. The honorable prime minister, Mr. Narendra Modi has wished to see the telecom industry self-manufacture the equipment required in telecommunication across the nation. Steps have been taken by the government to facilitate foreign investments to foster innovation in production. There has been a rise in FinTech in India. We stand at the third position on the global stage in this sector, only behind China and the U.S., with an adoption rate of 87%, which is more than that of any other nation in the world as of today. India's FinTech has grown to cover sectors from traditional banking, insurance, and retail to

paperless lending, mobile banking, secure payment gateways, and mobile wallets. This rise in digital infrastructure is a key factor fuelling India's rise toward its goal of developing itself as a desirable place for manufacturing.

The rise of the manufacturing industry in India aligns closely with its goals of becoming a 5 trillion dollar economy. To expect a GDP growth rate of double digits, we must focus on increasing investment, improving productivity, education, and health outcomes, creating jobs, raising agriculture productivity, maintaining macroeconomic stability, managing global megatrends, and improving governance, as said by former RBI Governor D Subbarao. India has already seen a robust 76 percent jump every year in FDI in the manufacturing sector to \$21.34 billion



in the financial year of 2022. The share of foreign investments in manufacturing has steadily risen and the automobile segment has been a big beneficiary. The Labour Bureau under the Ministry of Labour & Employment conducts the Quarterly Employment Survey (QES) as part of the All India Quarterly Establishment-based Employment Survey for establishments having 10 or more workers. As per the results of the first round from April to June 2021, it is found that employment has increased as a result of a 22% to 29% increase in the manufacturing industry. The government is also working on the "National Infrastructure Pipeline" scheme for rapid infrastructure growth with a \$1.4 trillion outlay for roads, railways, ports, airports, and industrial corridors. One such example is the National Industrial Corridor Development Programme (NICDP) to provide multi-modal connectivity for cities.

Though the road for India to become a manufacturing hotspot seems smooth, the ground reality speaks a different tale. The production and tax incentives promised to foreign investors and domestic manufacturers are far from being fulfilled. From running the gauntlet of pre-production permissions to the harassment of the Tax Man, foreign companies hoping to set up a base in the country have not experienced a smooth ride. The government admitted in Parliament that as many as 2,783 foreign companies ceased operations between 2014 and November 2021. Some of the big names include Cairn Energy, Holcim, Daiichi Sankyo, Carrefour, Henkel, Harley Davidson, and Ford. The occurrence of Ranbaxy falling foul of the US regulator for acquiring endorsements for drugs by distorting records is an exemplary instance of low production ethics. Unless we get our regulatory systems in line with international standards, it will be difficult to emerge as a manufacturing destination of choice.

As the nation turns into a worldwide manufacturing center, it is necessary to have a prepared pool of highly skilled and motivated workforce. The reception of innovation has proactively mechanized each area in the nation and spurred a gigantic interest in trendy innovation specialists. Consequently, the nation needs to have a smart course of action set up to work with the manufacturing industry and scale potential, opening doors to worldwide organisations.

# Exploring the Magic and Impact of **AUGMENTED REALITY**



GURDEV SINGH 6th Semester Metallurgy and Materials Engg. ave you ever wanted to see digital objects seamlessly integrated into your view of the real world? With Augmented Reality

(AR), that's now possible. With AR, you can see virtual objects come to life, interact with them, and manipulate them using gestures or voice commands.

#### The Magic of Augmented Reality:

AR is like stepping into a new dimension, where anything is possible. It brings digital objects to life

and enhances our perception of reality. AR technology works by superimposing computergenerated images on the user's view of the real world through a camera or other devices. By using computer vision algorithms, AR can recognize objects in the real world and overlay digital information onto them. This technology enables users to interact with virtual objects in a way that feels like they are part of the real world.

a subpresence on mobile / web

AR technology has already found a wide range of practical applications in various fields, from entertainment and gaming to education and healthcare.

in the education sector, AR can create immersive

learning experiences, such as virtual field trips or anatomy lessons, that engage students in a new way. For example, AR can help students explore historical sites or natural wonders that may be difficult or impossible to visit in person.

#### **Challenges Surrounding Augmented Reality:**

- Privacy Concerns: One of the primary ethical concerns surrounding AR is privacy. AR technology can collect a vast amount of personal information about users, such as their location, behaviors, and preferences. This information can be used for targeted advertising or even more nefarious purposes, such as stalking or surveillance.
- Bias and Discrimination: AR technology can also perpetuate bias and discrimination. For example, facial recognition technology used in AR may be more accurate for certain demographic groups than others, leading to unequal treatment or even harm. AR developers must be aware of the potential for bias in their technology and take steps to mitigate it.
- 3. Safety Concerns: Another ethical concern is safety. AR can be distracting, and users may become so engrossed in the virtual world that they lose sight of the real one. This can be particularly dangerous in certain situations, such as when driving or operating heavy machinery.

#### Impact on Society:

The impact of augmented reality on society is farreaching and multifaceted. On the one hand, AR has the potential to create new opportunities for creativity, education, and entertainment.

AR can have a significant impact on our perceptions of reality. AR blurs the line between the physical and digital worlds, which can make it difficult to distinguish between what is real and what is not. This can have both positive and negative effects. On the one hand, AR can be used to create new forms of art and expression that challenge our perceptions of reality. On the other hand, AR can contribute to the spread of misinformation and disinformation, making it even more difficult to discern what is true and what is not.

AR has the potential to change the way we interact with each other. AR can be used to create new forms of social engagement, such as multiplayer games that bring people together from around the world. However, AR can also contribute to social isolation and disconnection if it leads users to withdraw from face-to-face interactions with others.

In conclusion, the impact of augmented reality on society is complex and multifaceted. While AR has the potential to create new opportunities for creativity, education, and entertainment, it also has the potential to exacerbate existing social problems and change our perceptions of reality. As we continue to develop and use AR technology, it is essential that we consider its broader implications and work to ensure that it benefits society as a whole.





PRAVEEN CHANDRA PATRO CSE 1 st Year

# SPACE EXPLOSIONS AND EXTRA-TERRESTRIAL MATTER

uter space is filled with mysterious and amazing celestial bodies and also some terrifying but beautiful explosions. Astronomers from all over the world are always determined to explore and study its origin and expansion. The most common theory of the origin of the universe is the Big Bang Theory which states that the universe was born as a very hot, dense single point in space. The explosion of that point leads to the formation and expansion of space in the next 13.7 billion years.

Another mysterious case is regarding the existence of dark matter. It is not baryonic and is completely invisible to electromagnetic radiation including light but its existence was first observed by its gravitational effects on solar systems and galaxies.



The most creepy but wonderful case is that of a black hole. A black hole is a place in space where gravity is so powerful that even light cannot get out. It is mainly matter that has been squeezed into a tiny space. When a star dies, its center collapses into itself sometimes leading to the formation of a black hole. It has been theorized that the largest galaxies contain a supermassive central black hole with mass ranging from millions to billions of times the mass of the Sun.

Astronomers have also predicted the end of the Milky Way galaxy in which our solar system is also situated. They have calculated that after 4.5 billion years, the nearest Galaxy, Andromeda galaxy (M31) will collide with the Milky Way leading to the formation of a new galaxy.

You must have heard about a Nebula, let's see what it actually is.

Nebula is an interstellar cloud of dust, hydrogen, helium, and other ionized gases in outer space. It is mostly formed by gas and dust emerging out of the explosion of a dying star. One such nebula, NGC-7027, located around 3000 light years away from us, contains the universe's first type of molecule,

Helium hydride (HeH + ) which was formed just after 100,000 years of the Big Bang.

Now let's take a look at some extraordinary stars and moons.



Pulsar is a highly magnetized rotating neutron star that emits a beam of electromagnetic radiation.Quasar is an extremely luminous active galactic nucleus. Magnetar is a type of neutron star believed to have an extremely powerful magnetic field.

When we talk about moons, the first thing that we will imagine would be a Giant Sphere. But the planet Saturn has a very unique moon, Hyperion. Hyperion has an irregular shape and sponge-like appearance. It also rotates in a chaotic way around Saturn. It was also the first non-round moon to be discovered. It is also known as Saturn VII.

Titan is another special moon of Saturn and is approximately as big as the Earth. It is unique because it is the only moon known to have a dense atmosphere and the only object in space other than Earth to have stable bodies of surface liquid, and clouds that rain liquid methane.

Gamma radiation is penetrating electromagnetic radiation arising from the radioactive decay of atomic nuclei. Gamma-ray bursts are extremely energetic explosions and are the brightest electromagnetic events that are known to occur in the universe. Its after-glows include gamma rays, X-rays, UV light, and then optical light. Most supernovae are blamed for gamma-ray bursts and those supernovae are called super luminous supernovae or Hypernovae. Hypernovae are a type of stellar explosion with a luminosity of 10 or more times higher than that of standard supernovae.

Now you might be thinking about supernovae, so let's see what they are.

Supernova is an event or explosion that occurs upon the death of certain types of stars. The most recent directly observed supernova in the Milky Way was Kepler's supernova in 1604. They occur three times on average, every century in the Milky Way galaxy.

Outer space has everything that we require to gather information about the beginning and formation of the universe as well, as to predetermine the end of any celestial body. So, we should not pollute outer space and try to recycle the space debris which is already present there.





SHIKHAR SACHAN Electrical Engineering 2022 CAT 2021 CAT Percentile: 97.87

- 1. Mention the rank if possible and college that you have taken admission into/about to take admission into.
  - Indian Institute of Management, Bangalore
- 2. How many hours per week did you put into your preparation?

It averaged around 8-10 hours per week.

3. Could you enlighten the future aspirants about the mistakes they should avoid while preparing? My greatest insight which I can share with you all and the biggest mistake people make is to believe that, 'What worked for others, might work for them!' If you read a Topper's Talk, or any other section that celebrates academic achievements, always take it with a grain of salt. If you are a fish, you can only get better at swimming, if you are a cheetah, you can only get better at running, if you are a frog on the other hand, you can do both but only moderately good at either. I bring this point up to emphasize that only you know yourself, and hence it would be a mistake to follow what others did. This should, however, not obviate the need of talking to people and getting to know their experience, reading about their achievements. Doing so with the knowledge that they might have possessed resources you didn't have, and you might have some resources that they did not, will bring a relief to your preparation, and take the panic out of the equation. Identify what you are good at, and leverage it.

4. What factors to be considered while selecting the institution and what would be a good CAT score?

NIRF Ranking and QS Rankings serve as a good benchmark, but you should factor in proximity to the industry, the composition of the cohort, weather as well. Come up with a priority table, assign weights, and calculate your own scores for the institution. A Good CAT Score? Hmm... There is no good CAT score, there is just a threshold CAT score. Institutes calculate your merit by a composite score, with unique blends of your Class 10th marks, Class 12th Marks, Undergraduate Marks & your CAT Score. If your overall Composite Score is high, you are in for the WAT/PI round.

5. While preparing for one of the most competitive exams, how did you manage to keep your cool?

I looked at it as a value addition to my own self. Whatever knowledge comes my way, I am receptive towards it. Scoring well, or bad, then just becomes a function of how good your CAT Day was, how lucky you were with certain section. So, even if the CAT Day isn't my day, the knowledge I gathered throughout the journey is my prize.

What are your hobbies? Did they assist you in your preparation?

6.

I love reading and reading dictionary in particular. In my case, it hugely assisted my preparation. There is a section which tests your Verbal Aptitude in CAT, and it became a cakewalk.



Electrical Engineering 2023 CAT 2022 CAT Percentile: 99.55

**ARPIT SINGH** 

- Mention the rank if possible and college that you have taken admission into/about to take admission into.
- 99.55 Percentile.
- How many hours per week did you put into your preparation?
- 2-5 hours.
- Could you enlighten the future aspirants about the mistakes they should avoid while preparing?
- Well one of them will not to depend on any single section of the exam, rather try to be comfortable in all of the three sections, a decent score in VARC will help you more though. Further prepare yourself for the time limit of the exam, while attempting questions always keep in mind you have to do them fast. Usually the questions aren't tough but time consuming.
- What factors to be considered while selecting the institution and what would be a good CAT score?
- You can check whether the institution you want to enter has Alumni that have gone to work in the specific field that you want to, for instance, if you want to go in finance, so you should whether the institution you are

entering, has hosted former students that now work there, also check the curriculum of that institution if it helps. A decent CAT score would be above 90 and Percentile above 99.50 might fetch you chances nice colleges.

- While preparing for one of the most competitive exams, how did you manage to keep your cool?
- Usually people panic due to the time limit and pattern of the question paper, try to read comprehension and solve as much CAT questionnaire sets you can, it will help you gain confidence, and as you get familiar to the pattern you will automatically get cool with it.
- Advice/suggestions for future aspirants.
- Don't study without a plan, track your progress monthly i.e. your speed and accuracy, reach as many good articles as you can, increase reading proficiency.
- What are your hobbies? Did they assist you in your preparation?
- I like reading books and have been working as a Part time writer for 3 years, that helped me in tackling VARC section, that usually is a problem for CAT aspirants. Reading as a hobby I would say helped me attempt VARC without any other preparation.



ENJAM YASANK Mining Engineering 2022 GATE 2022 Gate Score: 719 AIR: 33

- When did you decide that GATE was the one for you? What made you choose GATE over other career options like CAT, placements etc?
- I chose GATE based on my interest towards technical subjects, I prepared for CAT exam before GATE, thus I could say I had tried both and the later worked out.
- When did you start your preparations? What was your strategy and how did you stick to it?
- I started my preparation from December, I had mostly solved numericals and tried to cover all the chapters basics and formulas.
- Was it difficult to focus on GATE and semester studies? How did you cope with it?
- GATE had actually helped me in improving my semester studies. Due to online classes I would be able to give most of my time at home studying.
- What all subjects did you feel were difficult? How did you overcome that?
- Systems engineering and geostatistics were tough since it was my first encounter and I didn't studied these in detail during my semester coursework.
- Did you attend any coaching institution for your preparation or sign up for any

examination module for your preparation? How was your experience?

- No mostly I solved Previous Year Questions and my CAT preparation helped me in GATE aptitude.
- What would you like to suggest to future aspirants?
- Solve numericals heavily and get full grip on previous year questions and basic formulas and their concepts.
- Did you anticipate your result when you were preparing for your exam?
- Thought of a 2 digit rank but never expected 33rd rank.
- What are your hobbies? Did they assist you in your preparation?
- Youtube helped me to relax in short leisure times.





Civil Engineering 2022 GATE 2022 Gate Score: 778 AIR: 14

HARSHIT KUMAR

- When did you decide that GATE was the one for you? What made you choose GATE over other career options like CAT, placements etc?
- I had dreamt of going to IITB since my JEE days and gate was sort of a redemption or a second chance to fulfil that dream.
- When did you start your preparations? What was your strategy and how did you stick to it?
- I started my preparation in May 2022, And the strategy was to learn from the same teachers that taught in the IITs that make the GATE paper. I watched the NPTEL lectures and solved the previous year questions several times. To stick to the strategy I had made a simple rule for myself that I will watch atleast one NPTEL lecture everyday regardless of how busy or uninterested I was. This made sure that even on the most unproductive days, my progress never stopped.
- Was it difficult to focus on GATE and semester studies? How did you cope with it?
- Managing the semester studies was a bit challenging specially because my gate paper was Geomatics Engineering and hence a lot of what was being taught in the Civil Engineering classrooms were not very useful. However I had divided the daily into timeslots for Gate preparation and Semester studies. Also the fact that, covid pandemic caused the classes to be held online made it easier to prepare for GATE.
- What all subjects did you feel were difficult? How did you overcome that?
- GNSS, GIS and Remote Sensing which are not covered in detail in Civil Engineering classrooms were difficult. I had to watch NPTEL lectures and

read a few books to understand the concepts. However while preparing for any competitive exams one should remember that what's difficult for you is probably difficult for your competitors too, you only need to perform relatively better than them, you don't need to score full marks.

- Did you attend any coaching institution for your preparation or sign up for any examination module for your preparation? How was your experience?
- I had taken a test series from APSED. It was a good test series as it's tests were of similar difficulty level to that of GATE's. In fact my scores in the mock tests were very similar to what I got in the actual exam.
- What would you like to suggest to future aspirants?
- I would suggest that they cover the entire syllabus atleast one month before the exam and practice the previous year papers repeatedly till exam.
- Did you anticipate your result when you were preparing for your exam?
- As soon as I saw the syllabus of the paper I was certain that I could get a rank under 50. However, there are only 8 seats in IIT Bombay in this domain through this gate paper so I had to work hard, and even after this good of a result I wasn't sure that I will get admission.
- What are your hobbies? Did they assist you in your preparation?
- .• I like reading novels and most of what I've read has been in the form of e-books, this probably made me more comfortable reading domain related ebooks.



When did you decide that GATE was the one for

- When did you decide that GATE was the one for you? What made you choose GATE over other career options like CAT, placements etc?
- I always knew that I would be going for higher studies as I really wanted to explore more of computer science. After a lot of research on internet and talking with people I decided that doing M.Tech from the old top IITs would be a better option. After I was placed in the month of July I had a lot of free time so that is when I had decided to give GATE a try.
- When did you start your preparations? What was your strategy and how did you stick to it?
- I had started my preparation from the month of August 2021 and I used to prepare for 6-7 hrs a day(though they were days when I hadn't studied at all). For the first few months I had mainly focused on completing the GATE syllabus and practiced previous years questions. And from the month of December I had started giving mock tests regularly and also revised all the subjects for every 20 days.
- Was it difficult to focus on GATE and semester studies? How did you cope with it?
- It was not difficult as there were only few subjects in the final year and since it was online I did get a lot of time to prepare for GATE. Only time I did face difficult was during the end semester exams, but I made sure to revise all the subjects during that time.
- What all subjects did you feel were difficult? How did you overcome that?
- Computer organization and architecture, Computer networks were the two subjects that I had faced difficult. And for every concept that I

# HEMANTH NARADASU CSE 2022 GATE 2022 Gate Score: 881 AIR: 44

learnt in these two subjects I had practiced good number of questions as they helped me to understand the concepts better.

- Did you attend any coaching institution for your preparation or sign up for any examination module for your preparation? How was your experience?
- I had enrolled for online coaching and various test series. They helped me to clear many of my concepts and prepar in a structured way. The gateoverflow website which is for GATE CSE has helped me a lot in my preparation. It had helped me to clear all my queries, concepts and has a good set of practice questions.
- What would you like to suggest to future aspirants?
- I would say to mainly focus on your basic concepts. GATE has a huge syllabus but the most important part is to identify and prepare only those topics that are very relevant. Practicing previous years questions atleast once is really very important (for previous years questions check gateoverflow website). Take atleast 10 mock tests before the real one as it would help to identify the loop holes in your concepts and for better time management. Finally be consistent with your preparation and believe yourself.
- Did you anticipate your result when you were preparing for your exam?
- Honestly I never thought about the rank that I would get as I did have a back up option as I was already placed. So there wasn't much of a presssure which helped me to stay focus on my gate preparation and I had enjoyed learning many new concepts.



SHAILESH KUMAR TYAGI Mining 2023 GATE 2022 Gate Score: 793 AIR: 15

- When did you decide that GATE was the one for you? What made you choose GATE over other career options like CAT, placements etc?
- After self analysis I made up my mind in the 4th semester that I want to join a PSU and working in a Maharatna company like Coal India is dream of many people and that motivated me too.
- When did you start your preparations? What was your strategy and how did you stick to it?
- For Gate- 2022 I started my preparation from July 2021.Talking about the strategy aspirants should devote their initial phase of preparation to studying mathematics and then major time should be devoted to their core subject. Numericals carry the maximum weightage so practising them and getting the fundamental concepts crystal clear would be added advantage to the preparation.
- Was it difficult to focus on GATE and semester studies? How did you cope with it?
- Semester exams were conducted online so it was easy to manage both.

- What all subjects did you feel were difficult? How did you overcome that?
- Few topics in mathematics and rock mechanics sometime feel little bit difficult but to overcome it more and more practice and revision of those concepts is the key rule.
- Did you attend any coaching institution for your preparation or sign up for any examination module for your preparation? How was your experience?
- I have taken a test series of mine portal only.
- What would you like to suggest to future aspirants?
- Focus on fundamental conceptual clarity and numerical solving ability.
- Did you anticipate your result when you were preparing for your exam?
- I was just hoping of a good result.
- What are your hobbies? Did they assist you in your preparation?
- Listening to devotional songs which calms me and soothes my mind and helps me to focus on my preparation.



SHANTANU KUMAR SHUKLA Mining Engineering 2023 GATE 2022 AIR: 56

- When did you decide that GATE was the one for you? What made you choose GATE over other career options like CAT, placements etc?
- As a student I was always confused about my choices until in my 3rd year I found out it was just a simple question. Whether I want to go for a government job or the corporate life. GATE was the way to achieve a job in a PSU, so I went for it.
- When did you start your preparations? What was your strategy and how did you stick to it?
- People may flaunt about preparing in months or just a year, but it always starts with building the basics. The teachers of my branch in my college were really amazing. The syllabus we follow is one of the best to cover and build up the basics for the Exam. So I always paid attention to the subjects related, from the 2nd year itself. It helped me to prepare a base and understand the theory behind. But the strategic preparation started in my 6th semester. It got itense in the 7th and 8th semester as the placement seasons and all increased my anxiety for a good job.
- My Strategy was to cover a limited material for a multiple times than covering multiple materials. I always kept record of my progress through mocks and previous year questions, which kept me motivated to stick to my strategy.
- Was it difficult to focus on GATE and semester studies? How did you cope with it?
- It really was. There was a time when it was like I have to choose one between GATE and the semesters. But I kept my patience and divided my

time for both. The hard time passes and my patience awarded me with a double digit rank in GATE and Silver medal in my branch.

- What all subjects did you feel were difficult? How did you overcome that?
- I found ventilation and rock mechanics to be one of the difficuts but with the guidnace of my senior and teachers I gained my command by solving some specific materials for these subjects.
- Did you attend any coaching institution for your preparation or sign up for any examination module for your preparation? How was your experience?
- For me the materials from my college was good to cover the theoretical parts. I was regular with my classes so I didn't attend any coaching Institute. I just bought a test series from a coaching institute to track my progress and it was a great experience.
- What would you like to suggest to future aspirants?
- Know yourself. Know your way for preparation. Keep patience and perseverance. Believe in your hard work and just keep going until you achieve it.
- Did you anticipate your result when you were preparing for your exam?
- Not exactly, but I always aimed to score a good rank.
- What are your hobbies? Did they assist you in your preparation?
- Reading books is one of my hobbies which kept me entertained during hard times, and thus kept me motivated for the exam.



# AKSHAY PILLAY Mechanical Engineering 2017 UPSC 2021 AIR: 51, Indian Administrative Services (IAS)

- When did you choose the UPSC as your career goal? Would you like to share your inspiration for the decision?
- I settled on the UPSC as my goal in my first year of college after exploring many options. I was inspired by my parents who are both civil servants. My sister also encouraged me to go for this. I also felt motivated by the good work done by IAS officers across the country.
- As per your experience, what would be the best strategy to score well?
- A good strategy would include the following:
  - 1. Understanding demand of the exam by analyzing syllabus and previous year papers.
  - 2. Carefully selecting optional subject based on interest and aptitude.
  - 3. Consistency in studies on a daily basis.
  - 4. Regular practise and correcting one's mistakes by working on feedback recieved.
- What would be the ideal time to start preparation and what would be the best way to prepare, is it via coaching or self-study?
- The ideal time is final year of college when one has both the time and maturity required. Coaching can only provide some guidance to aspirants. Sincere self study is essential, with advice from mentors/seniors/friends whenever needed.
- How are the UPSC interviews? Could you share some tips for the same?
- UPSC interviews are broad ranging discussions between a panel of experts(UPSC board) and the candidate.They touch on candidate's background, hobbies,current affairs,optional subject etc Being well prepared on one's Detailed Application Form (DAF), maintaining composure and experience of a

few mock interviews will help. Also honestly admitting when one does not know the right answer is very important.

- Did you anticipate your result? How did you feel after knowing that you have cleared the exam?
- I felt i would get selected but did not anticipate this rank. I feel very good because I have achieved my dream after five years of struggle. Further getting my desired service was a cherished moment.
- How many hours per week did you put into your preparation?
- On an average i devoted 8 hours per day. Sunday was reserved for tests.
- Could you enlighten the future aspirants about the mistakes they should avoid while preparation?
- 1. Referring to multiple sources eg books, notes etc
  - 2. Choosing so called high scoring optionals even if one lacks interest and aptitude.
  - 3. Procrastination is very dangerous.
  - 4. Not understanding demand of the exam. Therefore, guidance from a capable person helps.
  - 5. Lack of revision is a big mistake.
- What kind of profile should one groom during college, to get an upper hand during selections?
- There is no one profile which is certain to help a candidate. Nevertheless cultivating some hobbies, taking on leadership roles and being well versed in one's graduation subject can help.
- What kind of Hobbies and Interests do you have? And were you in any club or Committees in college?
- I am interested in playing badminton and following football. Taking part in quizzes also enthuses me. I was not in any club or committee.



# SAKSHI MUDLIAR

Civil Engineering 2019 UPSC 2022

AIR: 17, Indian defence services of engineer (IDSE)

- When did you choose the UPSC as your career goal? Would you like to share your inspiration for the decision?
- 3rd year, I explored various possible career options & found ese the most suitable as it provides a techno-managerial job profile & an opportunity to work in the government of India ministries to contribute towards nationbuilding.
- As per your experience, what would be the best strategy to score well?
- Solve pyq of mains first, repeated revision through short notes & practice rigorously through test series.
- What would be the ideal time to start preparation and what would be the best way to prepare, is it via coaching or self-study?
- 2nd year, by self study.
- How are the UPSC interviews? Could you share some tips for the same?
- It was more of a conversation The panel is cooperative & help you to give your best. Read newspaper regularly & try to interlink with technical concepts.
- Did you anticipate your result? How did you feel after knowing that you have cleared the exam?
- No, it was a dream come true. I felt overwhelmed with joy& a sense of

satisfaction.

- How many hours per week did you put into your preparation?
- 6-7hrs of efficient study is sufficient to crack the exam with top ranks.
- Could you enlighten the future aspirants about the mistakes they should avoid while preparation?
- Don't run after too many resources, Have your own plan & strategy. Have patience, analyse your mistakes & improve them.
- What kind of profile should one groom during college, to get an upper hand during selections?
- College years are the best to explore different career options & prepare a strong base for the same. Select a suitable career for yourself without getting influenced from the crowd. For UPSC-ESE, prepare your technical subjects with strong concepts. Industrial training, lab classes & final year project should be done seriously to get a practical bent of mind.
- What kind of Hobbies and Interests do you have? And were you in any club or Committees in college?
- My hobbies are reading novels & blogging. I was a part of literati-the literary committee of NITRR during 2nd, 3rd year of my college.

## WALL OF FAME

Nikita Tiwari

Co-Founder (NeerX

# Nikita Tiwari

ECE 2019 Co-founder, NEERX Forbes 30 under 30

As an alumna of NIT Raipur, can you tell us how your education and experiences at the institute influenced your career path and approach to entrepreneurship?

My journey as the founder of Neerx and an alumna of NIT Raipur has been significantly shaped by my education and experiences at the institute. The intensive curriculum and hands-on learning approach have equipped me with the technical foundation and critical thinking skills that are essential for any entrepreneur. Moreover, the Electronics department at NIT Raipur always presented me with new opportunities to embrace challenges and grow. During my internship program, I had the opportunity to work on a UNICEF project with a Padma Shri professor from IIM Ahmedabad, which exposed me to high-profile projects and instilled in me a passion for entrepreneurship. I am grateful for the knowledge and skills I gained during my time at the institute, and I continue to draw on these experiences as I lead NeerX towards success.

- How did you come up with the idea for NEERX and what inspired you to pursue this field?
- The inspiration for our venture, Neerx, took root during our college days, where we were exposed to a variety of problems faced by rural India. With the help of mentors from around the world, including MIT and Swinburne University Australia, we worked on developing solutions to these challenges. Our fortunate encounter with ISRO led us to the design of our first flagship product "SHOOL", and then right after my graduation we formally incorporated Neerx. Since then, we have been steadfastly working towards developing impactful solutions.
- What were some of the biggest challenges you faced while starting NEERX and how did you overcome them?
- While starting my venture, Neerx, I encountered numerous obstacles, both personal and professional. One of the biggest challenges was the initial scepticism from my family, who encouraged me to pursue a government job instead of starting my own business, as they believed entrepreneurship was not a suitable career path for a woman. However, I persisted with my dream and continued to work hard towards achieving my goals.

Another significant challenge was to understand the needs of the farming community and mapping it to their budget per acre. The adoption of new technology is often met with resistance, and convincing farmers to embrace a new way of doing things requires patience and effort. To overcome these challenges, we constantly strive to implement and upscale new technologies to better serve the needs of the farming community. Despite the obstacles, I remain committed to driving NEERX towards success and making a positive impact in the agricultural sector.

- What advice do you have for aspiring entrepreneurs who want to make a difference in the world through their work?
  - My advice is to be passionate about the problem you are solving and to never give up. Starting a venture can be a long and difficult journey, but perseverance is key.It's also important to not fall for the misconception that government grants are the only way to start a business. While grants can be helpful, they often come with restrictions and limitations. Instead, consider exploring other funding options, such as venture capital, and always keep an eye out for opportunities to network and connect with potential investors. Finally, don't be afraid to pivot and



adapt your business model as you learn and grow.

- Stay open-minded, be receptive to feedback, and continuously learn from your experiences. By doing so, you can build a sustainable and impactful business that makes a positive difference in the world.
- What do you think is the biggest challenge facing the agriculture industry currently and how do you see technology playing a role in addressing it?
- After working with farmers in India, we recognized their challenges with crop growth and the demand-supply gap due to production inefficiencies, low yields, and profitability. Agritech solutions have attempted to address these issues, but many lack innovation and come with a high cost. Farmers aspire to increase efficiency, reduce guesswork, and optimize crop yields through data analytics and sensor technology, which can provide valuable insights for informed decision-making. It's worth noting that sensor technology can provide valuable information beyond just above-ground data.
- What inspired you to co-found NEERX, and what is the mission and vision of your company?
- We at Neerx have a vision to improve decision making in farming practices by providing actionable insights with local soil & climate data.
- What has been your biggest accomplishment with NEERX so far, and why is it meaningful to you?
- As a successful entrepreneur, I take pride in the recognition I have received, including being featured on the esteemed Forbes 30 under 30 list and having the privilege of meeting with Hon'ble Prime Minister of India

Shri Narendra Modi. I am also grateful for the honor of being named one of the 50 Inspiring Women by Hon'ble Union Minister Mrs. Smriti Irani, as well as being recognized in the top Women Entrepreneurship Program by NITI Aayog and NASSCOM Design4India.

- Although all of these accolades hold significance, the NASSCOM Design4India award holds a special place for me. This recognition has helped to establish confidence in our product. Similarly, being listed on Forbes 30 under 30 is especially meaningful because it brings pride to my family, validates my hard work and accomplishments, and serves as an inspiration to younger members of my family to strive for success..
- What are some of the biggest misconceptions or stereotypes that people have about the agriculture tech industry, and how do you address those perceptions?
- The agriculture tech industry is wrongly perceived as being slow to adapt to technological advancements and only focused on large-scale farming. However, it continuously evolves and employs innovative technologies to improve farming efficiency, sustainability, and productivity. Additionally, agriculture tech supports small and family-owned farms, with startups and established companies developing solutions tailored to their unique needs.



## CLUB REPORTS •



# **Abhinay: The Dramatics Club**

Abhinay, The Dramatics Club of NIT Raipur portrays society through art. They perform street plays, stage dramas, sketches, poems, etc. Abhinay gives students a platform to showcase their talent and also works on polishing their skills.

he year began with the performance of "Badalta Wasseypur," a play that portrayed the story of Wasseypur in a modern context that spreads awareness about government schemes in smaller towns and rural areas. Followed by the "Har Ghar Tiranga" Nukkad Natak, which aimed to ignite the spirit of patriotism and pay tribute to the freedom fighters who led their lives for the country on the occasion of the Har Ghar Tiranga Campaign and the 75th Independence Day of India.

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Abhinay then performed a Nukkad to spread awareness among pregnant women in rural areas about maternal health during pregnancy and after the birth of an infant. This event was in association with Unnat Bharat Abhiyan (UBA). The club next collaborated with the E-cell of NIT Raipur to organize Fun-E-Stock, a fun event filled with poetry, stand-up comedy, and acts to aware people about the financial knowledge with some myths prevalent in the society.

The "Suno Raipur Cyber Security Campaign" was an initiative by the Raipur Police during the Independence week, where Abhinay volunteered to spread awareness about cyber-crimes and cyber security. In addition to this, on the occasion of World Mental Health Day, Abhinay performed a sketch on mental health, describing various mental health-related issues that often go overlooked.

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The club afterwards, performed a Nukkad Natak to spread awareness about corruption during the vigilance awareness week, showcasing the corruption which is not visible but resides with each one of us that affects the society apart from monetary corruption. Abhinay subsequently represented NIT Raipur in the Awaaz Nukkad Natak Competition hosted by IIIT Naya Raipur during its annual techno-cultural fest Technovate, where they bagged the 2nd runner-up place.

#### CLUB REPORTS

During the techno-cultural fest: MERAZ, in the Nukkad Natak competition at IIT Bhilai, the club performed "Baat Pyaar se bhi toh Ki Jaa Sakti Hai" Nukkad. Later, on the occasion of Women Pakhwada, Abhinay performed an awarenessbased Nukkad Natak "Tathya" to spread awareness about The POSH Act.

Abhinay then performed a sketch on road safety awareness in association with Raipur Police to inform people of rules and safety measures they can take. Abhinay furthermore organized UNKAHI 18.0, an Open Mic event in collaboration with Shaurya: The Sports Committee, during its Annual Sports Fest "Samar." Lastly, Abhinay Performed "Halla Bol" Nukkad Natak at Goonj, Nukkad Natak Competition at The Cultural Fest of NIT Raipur "Eclectika", where they were 1st runner-up.



The year for Abhinay was filled with diverse challenges and successes that the club accepted courageously with the support of their faculty in charge, Dr Govardhan Bhatt.Abhinay The Dramatics Club now looks forward to an even more glorious year.





### CLUB REPORTS

About the club

lick club is the photography club of NIT Raipur. It is a platform for beginners and photography enthusiasts to interact, learn, motivate and nurture their photography skills. It started with the motto of covering all the happenings and activities of the college. Gradually, the club has evolved in all the aspects and today being the most active club of NITRR, it organises a plethora of competitions, workshops and photo exhibitions to promote art of photography among youth.

#### **ANNUAL CALENDAR BY CLICK CLUB**

Every year, the club publishes a calendar with a different theme featuring the photographs taken by the members of the club.

CUCK CIUB

This year's theme for the calendar: Architecture Photography

#### **AURA- PHOTOGRAPHY EXHIBITION**

The club organised a 3 day photography exhibition for the students of the college to know more about the club and showcase the talents of the members of the club. The exhibition covered a varied range of genre of photography from architectural photography, street, astro and much more.

#### **ANNUAL PHOTOGRAPHY WORKSHOP**

The club organised the Annual Photography Workshop on 21st and 22nd January 2023 in offline mode under the supervision of Dr. S Sanyal. The 2 day workshop covered a wide range of topics regarding Basic Camera Handling, Rules of Composition and Photo Editing through Lightroom and Photoshop. The guest session of the workshop was delivered by celebrity photographer Mr. Kunal Gupta, who covered the session about fashion, product and professional photography through it.



# **CLUB REPORTS** •

#### PHOTOGRAPHY COMPETITIONS AND WORKSHOP

The club has organized various photography competitions throughout the year on social media platforms.

#### HUES OF NAVRATRA- PHOTOGRAPHY AND VIDEOGRAPHY COMPETITION

The club organised a festival -genre based photography competition on D2C platform, where the participants were required to submit one photograph of the festival of Navratri and the winning entries were displayed on the Instagram page of the club and winners were awarded with exciting goodies.

#### **BIRD PHOTOGRAPHY WORKSHOP**

The club also organised a workshop on 4th March 2023 by the alumnus member of the club Mr. Nitish Agrawal on bird photography and awareness on birds. It was an insightful session overall.

#### **PIXEL LANE- ANNUAL PHOTOGRAPHY EXHIBITION**

The club organised the annual photography exhibition from 10th to 12th February alongside Eclectika- The cultural fest of NIT Raipur.

The exhibition covered a varied range of genre of photography from architectural photography , street, astro and much more.

#### **ACHIEVEMENTS**

One of the photographs taken by the member of the club , Nirdesh Sharma was featured on the social media handle of National Geographic.

# **CLUB REPORTS** •



#### **ABOUT US**

The Entrepreneurship Cell of NIT Raipur is a nonprofit organization to cultivate and manifest the essence of entrepreneurship in the convoluting grey matters of the young force coming up.

# **WORKSHOPS**

#### AUGUST'S WEB MEETUP 14TH AUGUST 2022

Entrepreneurship Cell with Google Developer Group (GDG) Raipur organized an event with hands on sessions, teaching various technology stacks i.e., Django, Express, Firebase, DevOPs, etc. The speakers for the event were tech professionals who are working in various startups and MNCs worldwide.

#### FIGMA X LOTTIE MEETUP 21ST AUGUST 2022

The Entrepreneurship Cell with Lottie and Figma Raipur organized an event with hands-on sessions, teaching various technology stacks like Product Design, UI/UX and Motion Graphics.

#### ENTREPRENEURSHIP AND INNOVATION AS A CAREER OPPORTUNITY 26TH AND 27TH AUGUST 2022

The speakers for the workshop on 27th August were Vrihas Pathak Sir and Samveg Thaker Sir.Cofounders of Zenithec Techware.

An entertaining event "FUN-E-STOCK" was also conducted on 26 August 2022 in collaboration with Abhinay, The Dramatics Club. It was a standup comedy by Mr Kshitij Sharma, Mechanical Engineering Alumni of NIT Raipur.



#### MY STORY: MOTIVATIONAL SESSION BY A SUCCESSFUL ENTREPRENEUR 10TH SEPTEMBER 2022

The E-CELL organized another session to motivate students on how to conquer difficulties in a startup. The keynote speaker for the event was Mr Harsh Agrawal, founder of the successful startup PrintMine.in


PROBLEM-SOLUTION FIT AND PRODUCT-MARKET FIT 31ST OCTOBER 2022

Moving towards the technicalities of startup, this session was taken by Mr Kuldeep Pisda, Alumni NITRR, Backend and Cloud Engineer at Goldcast.

### B-MODEL AND DIGITAL MARKETING WORKSHOP 19TH AND 20TH NOVEMBER 2022

The keynote speaker for B-Model Workshop was Mr. Gyanendra Pandey, Executive officer, PHD Chamber from Chhattisgarh Committee and Mr. Vaibhav Suryawanshi, Director of Digital Sumo took the session on Digital Marketing.



#### ATAL INNOVATION MISSION

Atal Innovation Mission (A.I.M.) aims to foster an innovative and entrepreneurial culture throughout the entire nation. NIT Raipur is privileged to visit the schools around Raipur and mentors from E-CELL NITRR visited the following schools: Bharat Mata Hr. Secondary School on October 15, 2022

Delhi Public School Raipur on November 5, 2022

#### MEGA TINKERING ACTIVITY November 14, 2022

Under AIM, on the occasion of Children's day, students from E-Cell, NITRR visited three schools: Bharat Mata Hr. secondary school, JR Dani Girls School and Delhi Public School Raipur and taught school students various DIY Projects.



## E-SUMMIT'22 2nd and 3rd December 2022

E-Summit, the flagship event of E-Cell involves interactive sessions by eminent people in this field. The speakers during E-Summit share their views on entrepreneurship, their life journey with the audience and their struggles during their journey while setting up their start-ups.

This year we had with us Mr Manish Pandey from Josh Talks and Ms Shrishti Jain from Ticker by Finology for "Entropy", Mr Dhawal Phadke, Co-Founder at Sattviko for "Uthkrishth", Mr Anish Nanalike for Wall Street, Mr Aashish Solanki, Winner of Comicstaan Season 3 for E-Gathering and Ms Gurleen Pannu, Runner Up of Comicstaan Season 3 for Aarohan.

We had various investors from all over India as prominent judges in E-SUMMIT'22.

Apart from this, there were various events like Startup Expo, Innovation Manthan, B-Model Competition, B-Case Study, B-Quiz, Wall Street and Crinometrica.



# **Finance and Consulting Club**

**ANNUAL REPORT** 

#### **VISION AND GOAL**

The Finance and Consulting Club at NIT Raipur aims to cultivate students' interest in the financial sector and promote it as a viable career option post-engineering degree. The club provides students with an opportunity to explore the world of Finance, Business Consulting, and Analytics.

#### **NON-CORE WEEK:**

The club conducted its first series of events, the Non-Core Week, aimed at introducing everyone to the club and its vision. It included events based on finance and consulting like *Money Haul* and Guess-It-Mate Challenge.

Money haul was a mock stock trading competition held on 12th October 2022, in which the participants were given virtual money and they had to invest this money in real-time market simulation. The ones who ended up making the most profit were declared winners. The *Guess-It-Mate challenge* was a guesstimate competition organised on 13th October, in which the participants were evaluated based on their ability to make accurate estimations based on limited information. The challenge involved presenting participants with questions or problems that required them to use their knowledge, intuition, and reasoning skills to make a reasonable guess.



Workshops on finance and consulting were organized to help participants perform better in these competitions and enhance their knowledge about these domains.

#### **CONSULTING 101**

The club conducted a webinar named "Consulting 101: Discussing Consulting and Beyond" for those interested in joining the consulting industry as their future endeavour. Eminent speakers, Mr Peeyush Jain and Mr Mohit Garg shared their experiences in the field of consulting to widen the knowledge of 150+ attendees. The doubt-clearing session towards the end was interactive and answered by our erudite guests.

#### **MUDRA**

The club conducted its flagship event, Mudra, in February. It involved two daughter events - Fin-Ace 2.0 & Equity Edge.

Fin-Ace 2.0 consisted of two rounds and was the second installment of the Fin-Ace series. The event was organized offline with the aim of introducing undergraduates to the world of finance and inspiring them through quizzes that broadened their knowledge and fostered team spirit. The competition among participants was intense, and the large audience provided a confidence boost.

Equity Edge was a thrilling competition where participants had to prepare and present a wellresearched company analysis and at last, mark a conclusion whethere the company is investible or not. The companies and problem statement were provided to the participants by the club after shortlisting them from the first round. The winners were declared by a panel of judges and audience poll.

#### **CONSULTING PROJECTS:**

FCC NIT Raipur has partnered with HUDA, the urban planning agency of the Haryana Government, to analyze their current processes and provide innovative solutions to their organizational challenges. Similarly, the club has collaborated with The Nail Company, a unique startup, to help them establish their business and build a strong foundation. The club's team is dedicated to conducting extensive research and providing tailored solutions to meet the unique needs of each client.





# 1. SAVE SOIL MOVEMENT (20TH MAY 2022)

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Go Green NIT Raipur successfully organized an awareness talk session on "Save Soil Movement" in collaboration with Team Save Soil, Isha Foundation Volunteers. Many Students actively participated in the event and shown their concerned towards the nature.

#### 2. WORLD ENVIRONMENT DAY (5TH JUNE 2022)

"Planting a tree is the easiest way to align yourself with the cosmic rhythm". It's a little things citizen do, that make a big difference. On 5th June 2022, on the occasion of "World Environment Day" team Go Green organised plantation drive inside NIT Raipur campus under the guidance of Dr. A.M. Rawani, Director NIT Raipur, Prof-in-charge Dr. D.C. Jhariya and our respected and beloved faculties.



# 3. PLANTATION DRIVE (15TH AUGUST 2022 TO 22ND AUGUST 2022)

A plantation drive was successfully organised jointly by Team Go Green and horticulture committee at Shahid Lt. Arvind Shanker Dixit Memorial Garden, NIT Raipur as a part of "Azadi ka Amrit Mahotsav". The event saw the presence of Dr. A.M. Rawani (Former Director, Nit Raipur), Dr. P.Y. Dhekne (Former Dean Students Welfare), Prof. Subhashis Sanyal, Prof. G.D. Ramtekkar, Dr. Mithilesh Atulkar, Dr. N.K. Jain, Dr. B.K. Singh, Dr. Mridu Sahu, Dr. D.C. Jhariya (Prof. Incharge Go green) along with other faculties and all the participating members. The Forest Department of Chhattisgarh donated a whopping 2000 plants offruit, Aushadhi, medicine and oxygen.

#### 4. GREEN GANESHA (11TH SEPTEMBER 2022)

Go Green, The eco social committee of NIT Raipur organized Green Ganesha. An ecofriendly idol making competition which saw participation from all over the city in all age groups.



#### 5. CLEANLINESS DRIVE (30TH SEPTEMBER 2022)

A cleanliness drive was conducted by the Go green club of NIT Raipur under the guidance of professor in charge Dr. D.C. Jariya, Dr. Debashisha Mishra and Dr. Anoop Tiwari on the occassion of Gandhi Jayanti. The activities included picking up litter, sweeping and cleaning the whole campus. Students were encouraged to participate actively in the drive. The campus was visibly cleaner and more hygienic after the drive.

#### 6. GREEN DIWALI WEEK (24TH OCTOBER 2022)

In order to encourage students to celebrate an eco-friendly Diwali, the Eco-Social Club of NIT Raipur organized various exciting events including Puja Thali Decoration, Diya, and Rangoli making competitions. Participants had the opportunity to win exciting prizes and certificates.





# 7. PLANTATION DRIVE WITH NCC CADETS (11TH NOVEMBER 2022)

On the occasion of National Education Day, Go Green, the eco-social committee of NIT Raipur, in collaboration with NCC cadets of NIT Raipur, hosted a Plantation Drive. Dr. Shrish Verma, dean academics, along with other faculties and students planted various fruit-bearing plants in the institute campus. The event was successfully organized under the supervision of Dr. D.C. Jhariya, Faculty in charge Go Green, and Dr. N Manhas, Faculty in charge NCC. The drive was a successful move towards expanding greenery on the campus.





#### 8. GREEN LIBRARY (24TH DECEMBER 2022)

The Green Library was organized by Go Green, the eco-social committee of NIT Raipur, in collaboration with Sahyog, the mentorship club. The aim was to provide study materials to the students and raise awareness about eco-friendly practices. Old books, handwritten notes, and geometry equipment were collected and issued to the students. Members of Go Green and Sahyog did their best to manage the event smoothly. Overall, the event was a great success in spreading awareness about reusability and sustainability.



The Innovation Cell of NIT Raipur is a dedicated entity within the institute that aims to promote and foster innovation and entrepreneurship among the students and faculty. The cell is committed to creating a culture of innovation, creativity and problem-solving by providing a platform for students to showcase their talents and ideas. **I-talk** 

I-cell conducted various I-talk session/series throughout the year on astonishing topics. I-talk was done on regular basis for a fun and interactive way to learn new trendy topics and get innovative ideas and startups out of it. With the help of our brilliant speaker's knowledge and experience, it rekindles the creativity and problem-solving skills in students.

An I-talk was conducted on the topic-"**Invention To Innovation**". The speaker of this I-talk was Dr. Rishikesh Pandey, Chief Scientist at CytoVeris, Affiliate Faculty at UConn, Postdoctoral Associate MIT.

This session was held on June 21st, 2022.



Another intuitive I-talk was on the topic-"Challenges in Bio-Medical Equipment". Innovation and Makerspace jointly presented this event regarding Bio-medical equipment, employment opportunities, and more.



Înnovation Cell National Institute of Technology Raipur, India



The speakers of the event were Dr. Sapan Kumar, an MD in respiratory medicine from Christian Hospital in Mungeli, and Dr. Tukaram Khandade, a technical officer from Jhpiego in Raipur.

Event was held on October 10th, 2022.

This session was under the SASID Network organized by USAID RISE for the students and faculty of NIT Raipur.

#### **ORIENTATION PROGRAM**

I-cell in company with E-Cell and Makerspace organised Orientation Program on topic "Entrepreneurship for Engineers Course" held on 10th December 2022.

The speaker was Mr. Amit Shah, from Startup and Mentor Program Deployment Head- Central and North India, Wadhwani Entrepreneur.

#### **SEED GRANT**

I-cell offers a phenomenal opportunity to accelerate startups or innovative ideas with institutional seed funding of Rs.25,000/- to innovative startups for their growth and financial development.



# **ABOUT US**

ENGINEER'S DAY QUIZ:

CLUB

The Engineer's Day Quiz was conducted on the 14th September 2022 (Prelims) and 15th September 2022. by the Interact Club. The quiz was based on technology, science, and general knowledge. The quiz, being the first offline quiz after almost 3 years, witnessed a huge participation from all over the college out of which 6 teams made it to the final buzzer round. After a great quizzing action among the finalist, top 3 winners were announced and were presented with Amazon gift cards.



Interact: The Quiz Club, began its journey in 2013 and became part of the NIT Raipur Club Matrix in 2016 as the official guiz club of the college. The club has been under the expert guidance of Dr. Avush Khare sir. Since then. the club is actively conducting various guizzes to promote campus quizzing culture and provide a platform to unite quizzers. From conducting over 10 online guizzes during the lockdown period and coming back to offline mode with more exciting quizzes along with huge participation, the club has grown in all aspects. In addition, the number of fans of the club has increased over the years with more than 8k members in its Facebook group and around 1k followers on its Instagram handle. This year, the club has successfully conducted two offline quizzes namely-Engineer's Day Quiz and The Techonomic Quotient-X.

**Event Description-**



Winners -Vanshika Gupta and Lakhan Sharma First Runner Up Shivansh Patle Second Runner Ups Dubi Sao and Shivam Malve The Technomic

# THE TECHONOMIC QUOTIENT 10.0

The Tenth Edition of TTQ was conducted by the Interact Club on 5th February 2023 in association with The Technocracy during Aavartan 2k23. This also marked the 10th anniversary of the club. The event was conducted in two rounds, the first round was the subjective one in which 100+ teams participated, and out of these six teams made it to the finale. The guiz was based on technology, business, and general knowledge. The finalists were presented with exciting prizes.

Winners-Kunal Dhurwey and Sachin Malve First Runner Ups H Anshul and Aayush Bariar Second Runner Ups Nomesh Patel and Jaideep Biswas



### **ABOUT US**

Literati, the literature committee of the National Institute of Technology Raipur (NIT Raipur), is one of the most elite student societies in the college. With the objective of nurturing and enhancing the literary skills of the students by providing them a platform to showcase their talents and improve their existing capabilities, it undoubtedly brings out the best in every one associated with it. It functions not just for avid readers and writers, but for all students who are eager to learn.

Literati has been active on social media through its regular posts of the 'Word of the day' on its official Instagram handle.The main goal is to unpack the lexical information of new words and phrases for the expansion of vocabulary. T h e post contains the meaning, etymology, usage and an image related to it so that the reader can perceive and retain it for a long time.

#### LITERATI DEBATE EVENT

On the occasion of the Vigilance Awareness Week, Team Literati conducted an Oxford style debate competition on 2nd November 2022 from 3 pm to 5 pm at G4.







The topic of the debate was "Measures taken to combat corruption in India: effective or futile".

Dr. Satveer Singh and Dr. Chetna Sharma Rajput, Assistant Professors, Department of Humanities and Social Sciences, NIT Raipur were the honourable judges for the event. There were 12 participants, out of which 6 spoke for the motion and 6 spoke against the motion. The event witnessed a good participation from students all over the college. The audience participated actively in the debate through rigorous crossquestioning and examination of the points, facts and statistics presented by the debaters to support their argument.

The debate was followed by a fun quiz that shared its theme and was specifically intended for the audience. Correct answers were rewarded with exciting prizes. At the end, the winners of the debate were announced and the prizes were distributed.

#### **EXTEMPORE ON INDIAN HERITAGE**



Team Literati conducted the Indian Heritage Extemporé, a quiz cum extemporé competition, on 2nd January 2023 from 2 pm to 5 pm at G4.

The event was based on the theme of the great Indian culture and heritage, and was widely welcomed by the students, who participated enthusiastically in it. Dr. Anoop Kumar Tiwari, Assistant Professor, Department of Humanities and Social Sciences, NIT Raipur was the honourable judge for the event. The first round consisted of a written quiz where the participants had to answer a set of questions on the sheets provided to them. Out of the 77 students who participated in the first round, 6 qualified for the subsequent extemporé round. These 6 qualifiers went through two rounds of extemporé which encompassed a wide range of topics related to Indian history, art and culture.

Towards the end, an audience quiz was organised for the 200+ audience members attending the event. This quiz was thoroughly enjoyed by all and many amongst the audience won exciting prizes. The competition came to a conclusion with the announcement of the winners and the distribution of the prizes.



# MAKERSPACE

# **INTRODUCTION**

Makerspace is a collaborative workspace where innovators, designers, and creators can come together to share ideas, tools, and resources to work on projects and prototypes. These spaces are designed to encourage creativity, experimentation, and innovation, and typically provide access to a variety of tools and technologies such as 3D printers, and other manufacturing equipment.

AND



### **Ideathon**

NIT RAIPUR

Invent • Tinker • Engineer

ADIYER

The Ideathon event held on January 22nd was a showcase of creativity and innovation, bringing together bright minds to share their ideas. With two rounds of competition, the first round was a platform for participants to submit their best ideas, while the second round saw the top 11 teams presenting their pitches using visually engaging PowerPoint presentations. The event was made even more enlightening by the expert talk on 'how technologies will shape the future' by the esteemed jury.



#### **Challenges in developing Bio-Medical Equipment**

To gain knowledge from the top medical specialists, Team MAKERSPACE and USAID RISE organized a seminar to strengthen the management of medical devices and the competence of biomedical engineers and technicians. Strategies and interventions were developed to develop the curricula for biomedical technician education and increase the number of programs. To address these challenges, USAID

RISE offer support and resources to help organizations develop biomedical equipment including providing technical expertise in areas like design, engineering, and manufacturing and helping organizations navigate regulatory compliance.

### Data and Innovation - Event in collaboration with Entrepreneurship cell

On 14 Feb 2023 an event on data & innovation (day with data science) by Makerspace in collaboration with Entrepreneurship cell was conducted. Sameer Ranjan, our guest speaker who is also CTO and Director at Catenate corps strategizes the plan in data gathering and formatting the data and its importance in extracting insights and making business predictions.

### Entrepreneurship for Engineering - Orientation program organized by

### Makerspace in collaboration with Innovation cell and Entrepreneurship cell

Team Makerspace, in collaboration with the innovation and entrepreneurship cells, organized an orientation program on December 10th, 2022 at 10 AM with the main objective of entrepreneurship as an engineering course. They have included entrepreneurship as an open elective course in the 6th semester of engineering. Dr. Saurabh Gupta of the Department of Biomedical Sciences is teaching this course in partnership with Amit Singh, the Wadhwani Foundation's startup mentor and program deployment leader.



# **NIT RAIPUR MOTOSPORTS**

# NITRR Motosports Orientation Workshop (March-April 2022)

The club organized a detailed orientation workshop where all the newly admitted enthusiasts were invited. Dr. VK Gaba, Faculty in charge Team United Racing addressed the workshop. The guest speakers invited were alumni of the club who have contributed in the automobile industries for years.

250+ students actively participated, clarified their thoughts and perceptions about the club & automobiles in general.



#### Formula Bharat 2023

'Team United Racing' Participated through Motosports in Formula Bharat 2023 event Under supervision of Dr. V. K. Gaba and Dr. Anuj Shukla which was held from 19th of Jan to 24th of January



2023 at Kari Motor Speedway Racetrack, Coimbatore Tamil Nādu. Team consisted of around 30 members. The event asks for a Race ready Formula student car all designed and manufactured by the students itself of the engineering students of India.Team participated under Combustion vehicle category. Team achieved a Rank of 8th in Business plan presentation, 15th in Concept Goals and Management Report. The overall rank of the Team was 20th among 49 participating teams all across India.

#### SAE-E-BAJA 2022-23:

E-Baja is an Electric All-Terrain Vehicle making competition organized by SAE India. A team of 25 members from the Institute participated in this competition under the name 'Team IgNITRR'.

The event is organised in 3-phases. First phase is a preliminary round that accounts for the work flow of the entire team and their design perspective followed by innovative measures. Second phase consists for virtual events that include design report, sales report, cost report and virtual simulation of the fabricated car in IPG Car-Maker. In the 2021-22 session our team has been selected for the Finals in the Design Event. The team is going to Chitkara University, Baddi, Himachal Pradesh in April 2023 to participate in the final phase of the competition.

# **NATIONAL CADET CORPS**

# 4 Cadets of NIT Raipur selected for the EK BHARAT SHRESHTHA BHARAT Camp (Nationallevel NCC Camp)

The EK BHARAT SHRESHT BHARAT (EBSB-I) Camp was held at Kollam, Kerala between 24 Dec 2022 -02 Jan 2023. A total of 150 cadets were selected from MP & CG to represent their directorate, out of which 4 were from NITRR. There were 4 vacancies for 5 CG CT I COY which comprises of cadets of NIT Raipur, Science college and IGKV where 3 SD (male cadets) - Senior Underofficer Aditya Tiwari, 8th semester, MME, Sergeant Satyam Singh, 6th semester, CSE and Sergeant Bidari Mahesh Babu, Mining and 1 SW (female cadet) - Junior Underofficer Deepshikha Sharma, 6th semester, ECE were selected from 5 CG CT I COY, NCC, Army Wing, NIT Raipur. The selection of cadets was based on their record, performance in NCC like attendance, work and contribution. After which the shortlisted cadets were also screened by CO (Commanding Officer) Colonel Rakesh Budhani via basic interaction to judge the personality of the cadets.

At the Kerala camp, there were more than 600 cadets who participated in various activities like anchoring, group song, group dance, debate, NIAP presentation in front of ADG, NCC, Kerala and Lakshadweep Directorate. During the camp, SUO Aditya Tiwari performed the duties of camp senior. JUO Deepshikha Sharma performed as the Master of Ceremony at the ADG visit and prize distribution ceremony and SUO Aditya Tiwari performed as the Master of Ceremony at the closing and prize distribution ceremony of EBSB Camp. SGT. Satyam Singh participated in Debate competition, NIAP presentation and cultural performance and SGT. Bidari Mahesh Babu participated in NIAP presentation, group dance and cultural performance at the camp.



Combined Annual Training Camp (CATC) - 26 (15 Dec - 22 Dec 2022)

NCC CATC - 26 was organised by 8 CG GIRLS BN NCC Unit from 15 Dec 22 Dec 2022 at Lakholi , Raipur under the supervision of Colonel Ashish Badola , Administrative Officer and PI staff . Total 21 cadets (12 SW & 9 SD) from both the B and C Certificate examinees and NCC Incharge Dr. Neeraj Manhas of National Institute of Technology (NIT) Raipur attended the camp alongwith many other Institutions. Many lectures on Self defence techniques , Social Harassment , Cybercrime and securities , Weapon training , Fire demonstration and rescue operation etc. were conducted in the camp.



NIT Raipur NCC cadets participated in Kho-Kho and other competitions conducted in the camp. 9 SD cadets and 2 SW cadets participated in the Tug of War competition where cadets Akshita Midha & Madhupriya helped their company to win the competition. In Running competition CHM Yash Jaiswal finished at 2nd position and in Best Out of Waste competition Cdt Umang Taunk & Cdt Neha Sahu participated and won medals. In the cultural event which included events like singing, dancing, public speaking etc. cadets Namesh Naman Nishad, Pratyush Nagpal and Akshita Midha performed marvelously. In the Firing Competition , cadets Umang Taunk and Poonam Choudhary were selected and cadet Poonam Choudhary achieved 2nd position in this. In the Drill Competition CHM Yash Jaiswal, Cadets Namesh Naman Nishad, Deshansh Singh Tandey and Neha Sahu got selected from their respective companies for the competition. Cadet Neha Sahu helped her group to win the competition. A total of 12 medals were won by 9 cadets of NCC NIT Raipur in the CATC camp.

# 76th Independence Day celebrations by NCC Cadets

NIT Raipur celebrated the 76th Independence Day in the Institute on 15th Aug., 2022 with passionate, dedicated, and patriotic fervour. Dr. A. M. Rawani, Director, NIT Raipur unfurled the tricolour followed by the National Anthem. This was followed by 'Rashtriya Salute' and a platoon of NCC cadets led by SUO Aditya Tiwari smartly marched past saluting the Chief Guest and the National Flag. NCC cadets also organised a blood donation camp in which NCC cadets of NIT Raipur donated blood for the cause of social welfare.

### **Prabhat Pheries by NCC Cadets**

NIT Raipur celebrated Azadi ka Amrit Mahotsav and Har Ghar Tiranga by organizing Prabhat Pheries, which consisted of a series of events to spread awareness about 75 years of India's Independence, between 11th to 15th Aug., 2022. NCC cadets participated in the event under the guidance of Professor In-charge, NCC.

### UO Varsha Sahu Awarded The Group Commander Best Cadet Award

Under Officer Varsha Sahu was awarded the Group Commander Best Cadet Award by Dr. A.M. Rawani, the Director of NIT Raipur and Colonel Rakesh Budhani Sir, Commanding Officer, 5 CG CT(I) COY, NCC for being judged as the best overall female cadet amongst all NCC cadets of IGKV Raipur, Govt. NPG Science College, Raipur and NIT Raipur.

#### **Thal Sena Camp Selections**

The TSC is a 12 days camp conducted in Delhi every year in the late autumn, in which the cadets are selected from all 17 directorates, by the selection procedure conducting 3 pre-TSC camps each of 10–12 days in a week interval. From NIT Raipur SUO Aditya Tiwari and JUO Rashal Thakur selected for GP TSC-I SELECTION and TRG CAMP which was held at Bilaspur, Chhattisgarh.



# NRITYAM: THE DANCE CLUB OF NIT RAIPUR



#### **EVENTS:**

The much-awaited Grand Garba Eve'22, hosted by Nrityam, the dance club of NIT Raipur, on 30th September,2022 was a resounding success. After two long years of lockdown, the students and faculty came together to celebrate the festive occasion of Navaratri with enthusiasm and joy. The talented team members put an enthralling performance, showcasing their skills and passion for dance. The Garba night was a perfect blend of tradition and modernity, and it left a lasting impression on everyone present.

#### **ABOUT THE CLUB:**

Nrityam is the dance club of NIT Raipur that bring together the students who are passionate about dancing by allowing them to demonstrate their abilities by offering them a platform. The professor in charge, Mrs. Moksha Singh, serves as the club's mentor and guides and motivates the students to give their best.

Under Eclectika, the cultural fest organised by Team Sankriti, Team Nrityam hosted two captivating dance competitions on Feb 11th 2023 - Nrityangan, a platform for classical and semiclassical dancers, and Eclectika Dancing Star, a western dance competition. Nrityangan showcased the grace and poise of classical dance forms while Eclectika Dancing Star was a dazzling display of contemporary and hip-hop dance styles. The event was judged by eminent dancers such as Dr. Prateek Modi, and Pragati Patwa. These competitions saw an overwhelming participation from throughout the city.





# PERFORMANCES AND COMPETITIONS

Team Nrityam gave their performances at E-Summit 2k22, AAVARTAN, TedX, Eclectika and at the workshops that are organized by the college as well as on Republic day, and Independence day. The dance performances given by the club have always added a boost to the event which played a key role in providing momentum to the fest.

The annual techno fest of IIIT Naya Raipur "Technovate" organised "LET'S NACHO"- a dance competition to show the colors and energy of the youth through dance. Nrityam, The dance club of NIT Raipur participated and bagged the 2nd position with a prize of Rs. 6000 in group dance category. The winning troupe members were-Mradul Sharma, Ankita Choure, Varun Panchal, Utkarsh Singh, Tanvi Khedkar, Smita Prajapati and Anupma Pal, who lit the stage on fire with energetic and ravishing performance. V S Anagha also won the 2nd position with a prize of Rs. 2000 in the solo dance category with her graceful yet powerful display of classical style with a Bollywood twist.







# NSS -National Service Scheme International Year of Millets

National Institute of Technology Raipur organized an informative event to celebrate the International Year of Millets on 18th January 2023. This event was successfully conducted under the supervision of Dr. Govardhan Bhatt, Professor In-charge, of the National Service Scheme (N.S.S), NIT Raipur.

Dr. P.Y. Dhekne, Dean (Student Welfare) graced the event with his presence. Dr. Vinod Choudhry, Senior Scientist, IARI Raipur was the guest speaker for this event. Members of the Akshay Patra foundation were the guests of honour for this event. Dr. Vinod Choudhary was felicitated by Dr. Govardhan Bhatt and then he enlightened all the students about the initiative taken by our honorable Prime Minister Shri Narendra Modi to declare 2023 as the international year of Millets and expressed the need to spread awareness among youths about the vast advantages of millets.

Dr. Vinod Choudhary then began his presentation by explaining the importance of millet. The event was successfully concluded by Professor U. K Dewangan, Head, Chemical Engineering by felicitating volunteers from the Akshay foundation and Dr. Vinod Choudhary by presenting a memento as a gesture of gratitude.





"Plantation Drive"



On 19th September 2022, team NSS, NIT Raipur organized a plantation drive at the Dr. A P J Abdul Kalam Hall of the institute with the theme 'Plant a Tree, Save Million Breath'. Dr. Vinay Kumar Pandey, Faculty Dean of Agriculture Engineering in Indira Gandhi Krishi Vishwavidyalaya (IGKV) Raipur was the Chief guest of the event while Dr. P Y Dhekne, Dean (Student Welfare), NIT Raipur and Prakash Upadhyay, Head of Engineer's Association were the guest of honour. Both Dr. Vinay Pandey and Dr. Dhekne encouraged the audience to plant more trees and engage in social activities to contribute to society.

#### **SUNO RAIPUR CAMPAIGN**

Team NSS, NIT Raipur in partnership with Telibandha Police and Abhinay, the Dramatics Club organized an event to spread awareness regarding cyber-crimes and cyber-security under the aegis of the "Suno Raipur" campaign started by the police during Independence week; 15th to 22nd of August, 2022. The campaign was organized across the city, from venues like Magneto The Mall and Marine Drive to DDU Auditorium and 36 City Mall.



The event was organized under the guidance of NIT Raipur Director, Dr. AM Rawani and convened by Dr. Govardhan Bhatt, Asst. Prof. at NIT Raipur. Dean Student Welfare, Dr. PY Dhekne graced the

#### **"NATIONAL CONSTITUTION DAY"**

On 26th November 2022, Team NSS of the National Institute of Technology Raipur celebrated the 74th National Constitution Day, led by the Professor in charge, Dr. Govardhan Bhatt.

The event was graced by Dr. (Mrs) A.B. Soni, Director, and Dr. P.Y. Dhenkne, Dean of Student Welfare at NIT Raipur. Dr. Suresh K. Sahu, from the Azim Premji Foundation Raipur, was the Guest Speaker of the event. event as well. Saraswati Nagar Police station head Shruti Singh and SI Zaheer Ahmed discussed their experiences with cybercrimes and informed the audience about internet safety precautions that everyone should undertake.

#### "A DAY WITH REAL HEROES"

Team NSS of the National Institute of Technology Raipur organized a special event called "A Day with Real Heroes" on November 5, 2022, to honor the efforts of doctors, healthcare workers, police personnel, sanitation workers, and other frontline workers who risked their lives to save others during the Covid-19 pandemic. Guided by visionary Professor Dr. Govardhan Bhatt. The event aimed to pay tribute to the sacrifices made by the Real Heroes. The Chief Guest for the event was Dr. P.Y. Dhenkne, Dean, Student Welfare, at NIT Raipur.

The program started with the welcome of all the guests by Dr. Govardhan Bhatt. After this, Dr. P.Y. Dhenkne, delivered an inspiring speech, thanking the Real Heroes for their courage and dedication. The students of the NSS team paid tribute to the Real Heroes through their performances of songs, dances, and poems. The Institute's Official Language Committee (Raj-Bhasha Samiti) also presented a powerful drama, depicting the challenges faced by people during the Covid era.

Following this, everyone together read the Preamble of the Constitution, invoking the spirit of patriotism. Overall, it was a thoughtprovoking event that instilled a sense of pride and respect for our Constitution in everyone who participated.



# <u> RAAGA – The Music Club</u>

#### Introduction:

Raaga, the Music club established in 2009, was created with the objective of providing a platform to nurture and showcase musical talent. The club's history is closely intertwined with that of NIT Raipur, and since its inception, it has experienced significant growth. The club owes its success to the collaborative efforts of the students, Director, Dean Student Welfare, Professor In-charge Dr. S.Sanyal and Faculty In-charge Dr. Ayush Khare.

#### Auditions:

Every tenure Raaga conducts audition for various music domains including vocals, guitar, percussions, keys etc. This year, it was conducted on 29<sup>th</sup> & 30<sup>th</sup> of July where in total 13 students were selected from all domains out of 72 students.

#### Shruti:

Every year Raaga organizes its annual music fest Shruti and this time it was on 8th of November. Shruti'22 was a resounding success, with a large footfall attending and enjoying musical performances. The event began with a mesmerizing classical vocal performance, which set the tone for the rest of the evening. Students performed various genres of music, including rock, pop, folk, and fusion in total 16 songs and mashups. The audience was captivated by performances, and the atmosphere the was electric. Shruti'22 was an excellent evening for the 32 members to showcase their musical talents after 3 months hard practice sessions and provided an opportunity for the audience to appreciate the beauty of music.







#### Collaborations:

- Raaga collaborated with Sanskriti-the Cultural committee for the pre-Diwali celebration, and at the Eclectika Cult Night, which was a cultural extravaganza, it performed a medley of popular Bollywood songs. The performance was well received, and the audience was seen grooving to the music the club performed a fusion of classical and contemporary music, which received a standing ovation from the audience.
- Raaga also performed in AAVARTAN- the Tech fest organized by Technocracy leaving whole crowd mesmerized by the performance texture and presenting it astoundingly beautiful.
- Raaga also collaborated with E-Cell to perform in the E-SUMMIT 22.
- Recently, a successful performance was done with TEDx NIT RAIPUR.

#### Conclusion:

In conclusion, Raaga had a successful year in 2022, with the annual musical event, Shruti'22, being the highlight. The club's collaboration with Sanskriti & Technocracy and performance at numerous events showcased the students' musical talents. Raaga looks forward to another successful year in 2023, and we thank everyone who supported and participated in our events



# **RAJBHASA**•



# राजभाषा समिति

राजभाषा समिति हमारे संस्थान की एक आधिकारिक साहित्य संबंधित समिति है, जिसका उद्देश्य लोगों के हृदय में हिंदी भाषा के प्रति महात्वता एव जागरूकता को बढ़ावा देना है।

# आह्वानश्२२(८ सितंबर से १४ सितंबर तक)

भारत देश में हिंदी दिवस हर साल १४ सितंबर को मनाया जाता है। राजभाषा समिति द्वारा इस वर्ष भी हिंदी पखवाड़ा के उपलक्ष्य पर "आहवान'२२" का आयोजन ८ सितंबर से १४ सितंबर तक आयोजित किया गया था।

राजभाषा समिति द्वारा "आहवान'२२" कार्यक्रम का आयोजन समिति के प्रभारी (फैकल्टी इंचार्ज) डॉ. सपन मोहन सैनी सर के मार्गदर्शन में किया गया था। इस वर्ष शिक्षक वर्ग और छात्र वर्ग के लिए विभिन्न प्रकार की प्रतियोगिताओं का आयोजन किया गया था, जो निम्नानुसार हैं:--

# शिक्षक वर्ग के कार्यक्रम

# अ) कविता लेखन प्रतियोगिता

इस प्रतियोगिता में प्रतिभागी शिक्षक गणों को अपनी कविता रचना करने की कला द्वारा स्वरचित कविताएं लिख कर अपनी इस प्रतिभा को व्यक्त करना था , जिसमें वे किसी भी विषय विशेष पर कविता लिख सकते थे ।

# ब) निबंध लेखन

इस वर्ष यह कार्यक्रम 14 सितंबर को आयोजित किया गया था।इस कार्यक्रम का सर्वप्रथम उद्देश्य यही था की अगर एक शिक्षक अपनी मातृभाषा को प्रेरित करने हेतु इस प्रकार के कार्यक्रमों में अपनी रूचि प्रकट करता है तो उस शिक्षक द्वारा शिक्षित किए जा रहे विद्यार्थी पर भी इसका प्रभाव पड़ता है ।

# छात्र वर्ग के कार्यक्रम

## अ) नुक्कड़ नाटक

नुक्कड़ नाटक का आयोजन 8 सितंबर को किया गया था। इसका विषय हिंदी भाषा की महात्वाता पर आधारित था।इस कार्यक्रम में राजभाषा समिति के 15 से 18 सदस्यों ने प्रदर्शन किया।इसको संस्थान के मुख्य भवन के समक्ष प्रस्तुत किया गया था।इस प्रस्तुति को देखने के लिए भारी संख्या में छात्रों ने उपस्थिति दी थी।

## ब) कविता लेखन

राजभाषा समिति द्वारा ष्आह्वानश्२२७ के उपलक्ष्य पर सभी हिंदी प्रेमियों के प्रेम भाव को बरकरार रखते हुए "कविता लेखन " प्रतियोगिता का

# **RAJBHASA**•

आयोजन 9 सितंबर को किया गया था।कार्यक्रम के विजेताओं को 5000 तक रुपये के पुरस्कार से सम्मानित किया गया है।

# स) श्रुत लेखन

श्रुत लेखन कार्यक्रम का आयोजन 12 सितंबर को किया गया था।इस कार्यक्रम का उद्देश्य छात्रों की श्रवणेन्द्रिय को प्रशिक्षित करना है, ताकि वह भाषा के शुद्ध रूप को सावधानी से सुन सकें।

### द) चक्रव्यूह

चक्रव्यूह का आयोजन 13 सितंबर को किया गया था।इसके अंतर्गत 2 खेलो (म्यूजिकल चेयर एवम पिट्रूल) का आयोजन किया गया था।इन खेलो का आयोजन संस्थान के फुटबॉल ग्राउंड में किया गया था।इन खेलो में जीतने वाले प्रतिभागियों को पुरस्कृत करके सम्मानित किया गया था।

### मातुभाषा महोत्सव १२२ २१ फरवरी से २७ फरवर

राजभाषा समिति द्वारा श्अंतर्राष्ट्रीय मातृभाषा दिवसश् के अवसर पर कविता लेखन 3.0 ऑनलाइन प्रतियोगिता का आयोजन किया गया द्य इसमें केवल स्व—रचित रचनाओं को ही स्वीकृत किया गयाद्य जिसमे शिक्षक वर्ग और विद्यार्थी वर्ग दोनो बढ़—चढ़ कर हिस्सा लिया ।कार्यक्रम के विजेताओं को 4500 तक रुपये के पुरस्कार से सम्मानित किया गया है।

इन सभी प्रतियोगिताओं में सम्मिलित सभी प्रतिभागिओं को प्रमाण पत्र प्रदान किया गया है।



# **ROBOTIX** •



#### Home automation workshop

On Saturday 18th Feb '23, In an attempt to keep the students up to date with the upcoming future of robotics and IoT, the National Institute of Technology Raipur's (NITRR) ROBOTIX Club held a three-in-one workshop on Home Automation Technology to provide it's students insight on Internet of Things (IoT), Web Development and merging of the two fields. This event experienced huge participation from the students.

The workshop started with an introduction to the concepts of home automation and IoT, including the benefits, challenges, and applications of these technologies. The workshop then moved on to practical aspects of Home Automation and IoT, with a focus on Node MCU and programming languages.

The participants were given hands-on experience in setting up a Node MCU, connecting it to an LDR

sensor and Humidity and Temperature sensor to perform simple tasks like controlling the light according to environmental lighting and controlling the fan according to humidity and temperature. Students gained hands-on knowledge of Back End Web Programming, introduced to NodeJS, MongoDB, and HTML. Finally, they also developed an understanding of how web servers operate by combining IoT, microcontrollers, and web programming.

# ROBOTIX Club of NIT Raipur organises Robot Path Planning workshop

A workshop themed 'Robotics and Robot Path Planning' was conducted by the ROBOTIX Club on 21st January 2023. The main speaker of the event was Ms. Tejaswini Pallapothala, MTech scholar, IT Department. The workshop started with an introduction to robotics, and applications of

# **ROBOTIX** •



robots in different fields like healthcare, agriculture, defence, manufacturing and so on. The talk then progressed to precision and path planning of robots. Different approaches were discussed on calculating most the efficient path, obstacle routing and programming the robots. Programming in Python was introduced and

sample programs/algorithms were demonstrated.

#### **Report on Robotrek**

The ROBOTIX Club of National Institute of Technology, Raipur organized Robotrek a robot racing competition on 4th February 2023 for Aavartan'23, the Tech-fest of NIT Raipur.

It was one-of-a-kind robot racing where the robots competed with an exciting rivalry. The goal of the competition was to design and build robots that can navigate the track quickly and efficiently, while also avoiding obstacles and other robots. 4 teams - Robotriads, The Boys, Robo Kings, MechX were shortlisted for the final round. A lot of students were present during the final race to watch the race and cheer their favourite teams. The competition was very sporty that was flipping in the blink of an eye. At the end of the race, the top 3 teams were declared as the winner.

All the participants along with the audience learnt a lot about the robotics from the competition. The event successfully ended with the prize distribution to the winners.



**SAHYOG** - The Mentorship Club is a student community of NIT RAIPUR with the primary objective of providing constructive and positive interaction to students in the reputed institute. It has always stood forward in major social events which was made possible by the highly cooperative and agile members of the club. In the previous year Sahyog conducted the following events for the benefits of students and society.

#### **PITCH THE PECULIAR**

Pitch the Peculiar – "One of a kind hackathon" was a glorious opportunity for students of NIT Raipur to present their skills of development by coming



up with solutions for questions that are faced day in and day out by the students of the institute. It was a 3 round event with 6 problem statements on topics like classroom locators, mentor finding platforms to campus waste management. The event saw participation of more than a 100 new and unique ideas which flourished to be actual resources for the institute's students.

#### **GREEN LIBRARY**

In collaboration with 'Go Green'- the eco-social club of NIT Raipur it conducted a book donation drive known as 'Green Library. It was aimed to provide the accessibility of books and notes to all students of the institute. The drive was a free of cost initiative in which students can issue the available books and other materials which would be returnable after a semester. Freshers were the main target of the drive as they need access to all

# **SAHYOG**

the academic materials for their upcoming course examinations.



#### **MOCK PLACEMENT**

SAHYOG organized a three round placement session which was very useful for students. Over a thousand students participated in the event and experienced the interview process. The Mock Placement consisted of 3 rounds: Aptitude test, GD Round and the Final Interview. The Event was the replica of on-campus placements which was aimed to give students a prior experience of their upcoming journey.



#### **GROUP DISCUSSION**

In its series of interview preparation and soft skill development, Sahyog conducted a Group Discussion event during session 2022-23, more than 200 students participated in this event which was conducted in online mode. Students got a real time experience of the group discussion which will help them in interview preparation.

#### **PLACEMANTRA**

Sahyog conducted an amazing Placemantra event for the students of NIT Raipur to boost their journey towards a successful placement. It was a three day event where some of the successful alumni of our own institute guided the students in the fields of SDE, ANALYST and CORE. This session was a helpful source for many students, who got guided and boosted their journey towards a successful career.



#### **QUAD-SESSION 1**

Sahyog conducted its 1st session of QUAD on GRE, GMAT; an exam attempted in order to study abroad. The speakers of the session were K. Shivarama Krishnan and Inderjeet Singh Bhalla. They shared their perspective on studying abroad; the advantages of living there, better opportunities, infrastructure, lab facilities, good lifestyle, etc. Overall it was an interactive and helpful session.



# SANSKRITI •

I : ECLECTIVA 2

# ्र् सर्हार्गा The Cultural Committee

**SANSKRITI** – The Cultural Committee of NIT Raipur recently hosted its annual cultural fest, **ECLECTIKA'23** which ran for three days. The fest was based on the theme of traversing and exploring the extinct jurassic era and had the tagline **Xplore\_D\_Xtinct**. The event was a grand success, with students from various colleges participating in various mega-events and minievents held throughout the fest.

It was an honor to have Dr. Sameer Bajpai Sir, Head CDC, as the Chief Guest for this event. We were also privileged to have Dr. S. Sanyal Sir, HOD Mechanical Department, and Dr. Prabhat Diwan Sir, Dean(Research and consultancy), as our special guests. Their presence and participation in the event helped to enhance its success. Under the guidance of Dr. P. Y. Dhekne Sir, Dean(Student Welfare), the event was organized seamlessly and provided an excellent platform to showcase

talents. We are grateful to all the dignitaries for their valuable time and support in making this event a grand success.

One of the mega events of comedy, known as Tafree, was judged by Divyajeet Singh, co-founder of the Raipur comedy club. Another mega-event, the grand finale of Eclectika Idol, was judged by Pooja Jha, the winner of the State Youth Festival



Singing FAME competition. The Clash of Choreos, a crew dance mega event, was judged by Shabnam Khan from ZEE TV's DID - Super Mom.

One of the thought-provoking mega-events held during Eclectika was Goonj, a street play competition judged by Yash Nara and Trilochan Sona from Impulse Acting Academy and RSNM Theatre Group. The glossy fashion event, Allure, was judged by Lekha U Nair, Miss International Star 2021 and VMC Miss India 2020. Avirbhaav, the Battle of Bands, was judged by Ankit Blesson, recording artist of Flames S2, and Aayush Dwivedi, guitarist and composer. The art event, Kalopsia, was judged by Pankaj Yadav, a prominent artist at the Art Society of India in Mumbai.

The first evening of the fest featured classical performances by Nrityam, Raaga and students from the institute during the Cult Nite. On the second day, the grand Artist Night was held, featuring the talented singer, lyricist, and composer Amrita Talukder and the melodious voice of Yohani. The third night of Eclectika was an electrifying EDM night by DJ KAWAL.

Sanskriti also conducted other events like pre-Diwali celebrations, traditional day, Engineers day, kite festival, and patriotic days such as Republic Day and Independence Day throughout the year. The pre-Diwali celebration involved a traditional day, with all attendees dressing up in traditional costumes and dancing to the beats of Bollywood songs. Engineers' Day was celebrated enthusiastically to glorify the contribution of science in the era and to honor all engineers. A quiz competition and debate competition were conducted on Engineers' Day, and the top winners were felicitated. The kite festival was celebrated on Makar Sankranti, and the skies were filled with colorful and bright kites. The patriotic days, Republic Day and Independence Day, were celebrated to salute our glorious past.

In conclusion, Eclectika was a highly successful cultural fest organized by the Cultural Committee (Sanskriti) of NIT Raipur. The fest provided a platform for students to showcase their talents and celebrate Indian culture and heritage. The various events and games held during the fest were judged by notable personalities from their respective fields, adding to the prestige and excitement of the event. Eclectika was a memorable and enjoyable experience for everyone who participated in it.





eam Shaurya of NIT Raipur organized the 12th edition of Annual National Level Sports Festival, popularly known as 'SAMAR', from 26th to 29th January. This intercollegiate sports championship was a four-day event with an objective to bring together athletes from different colleges, to compete in a series of sporting events.

This year Team Shaurya also worked for the welfare of differently-abled children under the theme- "EMPOWERMENT OF DIFFERENTLY ABLED CHILDREN THROUGH SPORTS". Before the main event, Samar, our team also visited Kopal Vani Shravan Badhit Aavasiya Vidyalaya, an NGO dedicated to the upliftment of differently abled children. The team interacted with them through sign language. Various fun activities were organized for the children in the school. The team also got an opportunity to visit the art exhibition which showcased their talent in paintings and sculpting.

There was a huge participation from sportspersons and 25+ different sports activities like cricket, football, basketball, volleyball,

handball, chess etc. were organized. The sportsmen showcased their skills in a highly competitive environment. Inter-college matches were also held for sports like cricket.

Team Shaurya ensured that the sporting facilities were up to standard, with ample amazement for both spectators and athletes. The safety and welfare of the athletes were given utmost priority, and medical personnel were always present to attend to any unforeseen medical emergencies.

Each game was played with utmost integrity and sportsmanship, with the athletes displaying a high level of commitment, determination and discipline. The games were officiated by highly trained referees, who ensured that all rules and regulations were adhered to, in order to maintain a fair and just playing field.

The final day of the event was marked by a closing ceremony where the winners were awarded with certificates and trophies. The event ended with an electrifying night of EDM MUSIC with Team Shaurya, featuring the dynamic beats of performing artist 'Avoila'.

# TCP •



TURING CLUB OF PROGRAMMERS NITRR

# **CODING CONTEST** "Newton School"

ollaborated to conduct a coding contest for 2nd year college students on October 27th, 2022. Over 250 beginners participated, with a focus on time management, and real-world problems. The event aimed to introduce them to online coding culture.

### **TCP Coding Contests:**

TCP offers online coding contests and mentorship programs to introduce beginners to online coding culture and improve their time management and problem-solving skills.

### Introduction to Mentorship Program:

TCP's core mentorship program aims to guide 2nd year students in programming and make them interview-ready for internships. The program also includes 3rd year guidance and focuses on comprehensive growth through peer/senior interaction. Mentors are assigned to facilitate communication and ensure juniors are prepared for the job market.

## 30 Days of Code Challenge:

CodeUtsava's annual Coding Fest was kicked off with a 30-day coding challenge (5th Jan - 4th Feb, 2023) aimed at inculcating consistent coding



habits among mainly 1st year students. Participants solved a new problem statement every day to win prizes worth 16,000 and practice a variety of questions to build strong foundations.

#### **TCP Workshop:**

#### 1) Cloud Computing and Databricks:

TCP organized a workshop on cloud computing, Databricks, and placement guidance with a guest speaker, Rohit Agarwal.

# 2) Competitive Programming and the Ultimate Algorithm Roadmap:

TCP conducted a workshop on competitive programming and algorithm roadmap with Google's Prateek Narang as the speaker.

## 3) Artificial Intelligence and Machine Learning:

Surya Pratap Kahar, founder of Techdose, spoke about ChatGPT's scope and workings at Team TCP's Codeutsava 6.0 workshop.

# TCP •

### Fun events:

CODEUTSAVA 6.0 included fun activities such as:

- Code Riddles
- IT Quiz Round
- Design a Logo
- Ultimate Gaming

### Hackathon:

Code Utsava's main event is a 28-hour hackathon where teams from across the nation compete to create innovative solutions for various problem statements. The solutions developed have contributed to the local IT hub of the City & State in previous years. Some problem statements include creating apps for monitoring ICU room conditions, detecting sleepy drivers, and summarizing class lectures.

# Mock Interview with TCP:

TCP conducts online coding contests and mentorship programs to help participants practice and implement covered concepts. The contests aim to introduce beginners to online coding culture, improve their time management, and expose them to competitive programming and real-world problems.

ICPC format coding Contest & Speaker session:

Algo University and TCP are hosting a free speaker session on the impact of recession on placements, and an ICPC-style coding competition on March 25th and 26th, aimed at mentoring and guiding juniors and peers.



# **TECHNOCRACY**•



# The Jechnochacy

he Technocracy is the students' technical committee of NIT Raipur, it was established in 2007 by like-minded technocrats of the college. TechnoCracy aims to inspire every student to explore their creative potential and uncover the hidden possibilities of science and technology.

The committee remains active throughout the year but the major event of the committee is Aavartan. Aavartan is the premier technical festival of NIT Raipur that showcases the best of innovation and talent in central India. It is also the largest technical festival in the region by all standards. This year The Technocracy organized the 14th edition of Aavartan, Aavartan'22-23. After the challenging break from 2019 Aavartan

returned better than ever before. The fest was organized in NIT campus on 4th & 5th February 2023. The fest featured a massive footfall from all over Chhattisgarh including many participants from other states as well.

The fest began with the inauguration ceremony with Mr. Manoj Khare, MD CSPDCL as the chief guest. Which was followed by the signature event Vigyaan. Vigyaan is a national-level science exhibition. The vision behind Vigyaan is to ignite the talented minds of the nation & provide them with a stage to showcase their ingenuity. Over 120 teams registered for Vigyaan, only the most brilliant and innovative teams made the cut into the exhibition. Vigyaan not only highlights these

# **TECHNOCRACY**•

ingenious innovations but also helps them attain fruition. The top teams after the exhibit will be provided grants by the Incubation cell NIT Raipur, to help them achieve their goals.

The fest also featured many technical and fun events such as Ecopolis, Hydrolift, CodeTag, Treasure Hunt, Shipwreck and Open mic. Apart from these, there were major attractions for each day of Aavartan, on the first day performances of Team Nrityam, Raaga & the band Infected 7 hyped the audience with their magical performance & one the second day DJ Swattrex ignited the stage with his music. Aavartan'22-23 was a grand celebration of science and technology that brought together students, innovators, experts and enthusiasts from different fields and regions. It was a platform for learning, sharing, competing, and having fun. The Technocracy hopes that Aavartan inspired everyone who attended it to pursue their passions and dreams with creativity and curiosity. The committee also thanks all the sponsors, partners, guests, and volunteers who made this fest possible. Aavartan will be back next year with more surprises and excitement.





# **PROMOTIONAL EVENT**

eam TEDxNITRaipur conducted the promotional event at Eclectika 2023, in which we took our participants on a trip down memory lane with us, reliving their excitement of childhood at our nostalgic fun event through amusing games like Footloose, Steal the Bacon and Whisper Challenger as well as Sky Lantern Event and Guess the Speaker Challenge.

#### Main Event:

The sixth edition of TEDxNITRaipur was conducted in March 2023. Promoting the theme of "Dare, Defy, Differ", which was centered around the Ideas Worth Spreading to Inspire, Change and Ignite Progress at TEDxNITRaipur. The event was inaugurated by Dr. Sanjeev Das, faculty in charge of TEDxNITRaipur.

Starting off the event with our first speaker Gp Capt Y Srinivas. An Engineer, Veteran, Mentor Of Change Chhattisgarh and so on. His talk let the audience connect to the TEDxNITRaipur stage as shared his insights on veterans transitioning back to civilian life. He taught the listeners to be patient with themselves while adjusting to new routines and expectations.

Our second speaker, An alumnus of NIT Raipur, Anand Jain is a 1999 batch IPS officer. In recognition of his achievements, Jain has received several awards including the prestigious "Sher-i-Kashmir Police Medal for Gallantry". Serving as an Director of Anti Corruption Bureau J&K, Anand sir took the listeners at the very start of his journey. From being a small town boy working hard to receive better education, strategising his attempts and securing 89th rank in civil service examination.

Next, Mr. Deepak Pareek who is a prominent Social Media Influencer, Entrepreneur, Content Creator and Keynote Speaker ignited inspiration in youngsters as he took the stage. He ventured through his life struggles remembering the phase of being bullied in early age and standing up against it.

Then, Ocean Sharma who is a professional esports player and gaming commentator who has won numerous championships was there to set the stage ablaze. A true expert in e-gaming, and his skill, passion, and advocacy work have made him an inspiration to many. Ocean spoke with clarity and conviction, conveying a deep understanding of the challenges that many people face while entering an industry.

Our next speaker Aarzoo Khurana began her career as an advocate, but she was drawn to photography. After finding her calling in wildlife photography and having her work featured in notable authorizations such as Discovery. Her talk was focused on recognizing and addressing the systemic and cultural barriers that have historically held women back and creating a new legacy through hard work.

The next speaker, Mr. Prakhar Kotadia is the founder of the NGO Roopkesarvatika and was the youngest speaker on our panel. He's a natural environmentalist. This 22-year-old reformer took on himself to replenish earth-our only home - into its original form. His talk specified that failure is our best teacher, and it is just a temporary detour, not a dead end.

The last speaker for the event was Mr. Rajat Sood, the winner of Reality Stand Up Comedy Show-India's Laughter Champion. He is a Stand Up Comedy Artist from Delhi and has charmed us with his mesmerizing poems, hilarious stand-up comedy, and fascinating vlogs. His journey from copying the observations of the lab manual in PCM days to developing the art of observational comedy by portraying his personal narrative, noticing everyday phenomena and presenting his unique perspective was enchanting to listen to.



# **UNNAT BHARAT ABHIYAN 2.0**

UBA 2.0 is a flagship program of Ministry of Education (MOE). Its aims to enrich Rural India by using knowledge and resources of premier institutions of country are to be leveraged to bring in transformational change in rural development process. The second phase of Unnat Bharat Abhiyan 2.0 (UBA 2.0) was launched in April, 2018.



he mission of UBA is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth.

NIT Raipur is participating in Unnat Bharat Abhiyan as a participating institute from its first phase. In consultation with the District Collector Raipur a cluster of five villages in the Development Block Dharsiwa, namely, Bendri, Chataud, Nardaha, Pacheda, and Pirda-2 have been identified. Initial discussions with the inhabitants of these villages are going on to understand various problems and issues and to come up with feasible solutions for the same. Some of the areas the UBA cell of NIT Raipur has identified to work on these villages such as village sanitation, drinking water supply, energy including renewable energy, agriculture and allied activities, irrigation, improving technology of handicraft and artisans, affordable housing, improving educational standards, improving health etc.

In April, 2018 second phase of Unnat Bharat Abhiyan has been launched. In order to

facilitate, guide and monitor the activities of the participating institutions in Chhattisgarh region, NIT Raipur identified as a regional coordinating institutions (RCI) by the Ministry of Education, GOI to contribute in the implementation of Unnat Bharat Abhiyan effectively. The institute will act as nodal centres for promoting & facilitate UBA network in Chhattisgarh region.



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**UBA** 



These will be responsible for grooming the other participating institutions in their region in addition to carrying out their own village cluster activities. Currently in Chhattisgarh region, NIT Raipur has 43 Pl's in 8 districts.

The RCI-UBA team comprises Dr. Sudhakar Pandey, the Regional Coordinator (Associate Professor in the Department of IT), along with committee members Dr. Jagadish (Assistant Professor in the Department of Mechanical Engineering), Dr. Mani Kant Verma (Assistant Professor in the Department of Civil Engineering), Dr. Vandana Agrawal (Assistant Professor in the Department of Architecture), and Mr. Sachin Kotwani, a UBA staff member. Also, a UBA student club has been formed, consisting of students named "UBA Club" from different branches, to perform UBA activities. The UBA club's active participation helps to achieve goals of the UBA program.

The RCI-UBA team of NIT Raipur organized three orientation workshops till now to provide a platform for existing and newly joined participating institutions to interact with each other and share their experiences. The workshops were attended by representatives of participating institutions from different districts of Chhattisgarh. The objective of the workshops was to build capacity, facilitate exchange of ideas, and strengthen the network of UBA in the Chhattisgarh

Furthermore, The RCI-UBA team of NIT Raipur organized several webinars to enhance the capacity of participating institutions and promote knowledge sharing. The webinars covered various topics such as the National Education Policy 2020, Unnat Bharat Gram Aarogya Series, Rural Development through Rural Infrastructure facilities, and Guest lecture for funding & convergence from IEEE.

In addition, NIT Raipur organized awareness campaigns in their adopted villages to aware the villagers about water conservation, government plans, health hygiene, cleanliness etc. The UBA team from NIT Raipur has also made regular visits to the participating institutes to offer initial guidance, monitor their UBA activities, and provide them with seed knowledge about UBA activities. In financial year 2022-23, the RCI-UBA team organized a "Tech4Seva Workshop" on 22nd July 2022 at PPT Hall, CDC Dept., Second Floor, NIT Raipur in hybrid mode. The aim of the event is to invites technologies that have application in rural areas of the country and can contribute towards making our villages AtmaNirbhar. Under the program, we had invited UBA Pis/ scientist/ researchers/ entrepreneurs NGO etc. who voluntarily wish to share their technologies. We received seven technologies from PIs and researchers they demonstrated the same in the workshop. Then we had selected 3 technologies and facilitated to them with participation certificate and cash prize.

Apart from them the guest lecture was organized by the National Institute of Technology Raipur's Unnat Bharat Abhiyan (UBA) on the topic of "Funding Opportunities on Humanitarian Projects to Meet SDG's through IEEE." The lecture was given by Dr. Vijayalaxmi Biradar, who is the WIE Chair of IEEE, M.P. Section 2023. The lecture was held on 23rd February 2023 and aimed to provide information on various topics related to IEEE, including funding opportunities, student grants, special interest groups on humanitarian technology, and initiatives and programs for funding priorities, among others.

The RCI-UBA team of NIT Raipur has played a significant role in promoting and facilitating the Unnat Bharat Abhiyan program in the Chhattisgarh region. The team has organized various activities such as orientation workshops, awareness campaigns, inspection visits, and webinars to strengthen the network of UBA in the region and enhance the capacity of participating institutions. The efforts of the team have contributed to the development of rural communities and improved the quality of life of the people in the region.



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