

CURRICULUM VITAE

SHIVANGI GIRI

Assistant Professor (Grade-II)
Department of Biomedical Engineering, NIT Raipur

Email: giri.shivangi@gmail.com

Corresponding address: Flat No. 4/2C, Block 4, Singapore City, Kota,
Raipur – 492001, Chhattisgarh

Mob. No. - +91-9450666459



Objective:

To be a part of an organization that recognizes the fullest potential of an individual and inspires one to achieve personal and professional goals to effectively contribute to the organization and national growth.

Research Interest:

Biomechanics and Rehabilitation engineering, Musculoskeletal Modelling.

Educational Qualification:

Degree	Examination Passed	Year of Passing	Institute	Board/ University	Subject/ Discipline/ Specialization	Class/ Division	% of marks/ grades
X [10]	High School	2005	St. Mary's Convent Inter College, Allahabad	ICSE	All essential science and other subjects	1 st	86.0
XII [10+2]	Intermediate	2007	St. Mary's Convent Inter College, Allahabad	ISC	P.C.M.	1 st	84.33
UG Degree	B. Tech.	2011	JSS Academy of Technical Education, Noida	UPTU (now known as AKTU)	Instrumentation and Control	1 st (Hons.)	75.32
PG Degree	M.Tech.	2016	Motilal Nehru National Institute of Technology (MNNIT) Allahabad	MNNIT Allahabad	Biomedical Engineering	1 st	8.95 (CGPA)
Doctoral	Ph.D.	2023	Motilal Nehru National Institute of Technology	MNNIT Allahabad	"GAIT ANALYSIS COMPARISONS BETWEEN EARTH-BASED AND HYPO-GRAVITY ENVIRONMENTS TO DEVISE SPACE TRAVEL"		

			(MNNIT) Allahabad		STRATEGIES: A MUSCULOSKELETAL MODELLING- BASED SIMULATION STUDY”
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Professional Experience:

- **1 year 2 months** post-Doctoral work experience at IIT Delhi.
- **2 years** of experience (October 2011 to December 2013) as a Network Specialist at Infosys Limited to provide global technical support on Juniper SRX firewalls.
- Juniper Networks Certified Associate (JNCIA), Juniper Networks Certified Specialist (JNCIS-SEC)
- Attended training for C, C++, JAVA computer languages and DBMS at Infosys and passed all end training examinations.

ACHIEVEMENTS/AWARDS:

- **Winner** of Developing Country Student Travel Grant for poster presentation at ISB 2019, Calgary, Canada.
- **Winner** of U.B.O (University of West Brittany, France) Incoming Doctoral Student Mobility Grant, Spring 2018.
- Awarded **Gold medal** for standing first in final examinations of **M. Tech. Biomedical Engineering**.
- **GATE-2010** and **GATE- 2014** qualified in **Instrumentation Engineering**.
- Awarded **MERIT Certificate** for excellent performance during the **UPTU** Examinations held in the academic year **2007-08**.

Posters/ Conference Proceedings:

- **Shivangi Giri**, Asma Salhi, Mathieu Lempereur, R.P. Tewari, Bhushan Borotikar. “Effect of gait speeds on lower limb muscle synergy and joint moments”, selected for poster presentation at the **Congress of International Society of Biomechanics (ISB) 2019**, Calgary, Canada from July 31- Aug 04 2019.
- **Shivangi Giri**, Bhushan Borotikar, R.P. Tewari. “Evaluation of muscle activity during swing phase using OpenSim: Implications for Lower Limb Prostheses Design”, selected for poster presentation at the **World Congress of Biomechanics (WCB)**, Dublin, Ireland – July 8-12 2018.
- **Shivangi Giri**, R. P. Tewari, J. K. Rai. “Significant Lower Limb Muscles in Walking and Running for Design of Low-Cost Swing-Assist Rehabilitation Device”, Proceedings of **International Conference on Bioinformatics and Systems Biology (BSB-2018)**, IIIT Allahabad- October 26-28 2018, pp. 93-96, doi: 10.1109/BSB.2018.8770541.

Publications:

- **Giri, S.**, Tewari, R. P., Salhi, A., Lempereur, M., and Borotikar, B. (January 26, 2022). "A Musculoskeletal Model Customized for Sagittal and Frontal Knee Kinematics with Improved Knee Joint Stability." **ASME. J Biomech Eng.** doi: <https://doi.org/10.1115/1.4053666>
- **Shivangi Giri** and R. P. Tewari, “Alterations of generic musculoskeletal models to incorporate realistic knee joint and muscle geometry for biomechanical analyses during

healthy gait". (Accepted in Int. J. of Biomedical Engineering and Technology on 18th Jan 2023).

Workshops:

- **Delivered** an Expert lecture on “Demonstration on Musculoskeletal Modelling Using OpenSim” during the One Week Online STTP on “Emerging Trends and Challenges in Biomechanics and Biomaterials” organized by the Department of Biomedical Engineering at NIT Raipur from July 25-30, 2023.
- **Organized** a Short-term **GIAN** course on Introduction to Image based modeling and simulation: Applications in Musculoskeletal Biomechanics by Dr. Bhushan Borotikar, IMT Atlantique, Brest France and LaTIM INSERM, April 22 -26, 2019 at MNNIT, Allahabad.
- **Attended** a Short-term **GIAN** course on Emerging Trends in Bio-Robotics for Development of Prosthetic and Orthotic Devices by Dr. Ravinder Dahiya, School of Engineering, University of Glasgow, UK, December 19-30, 2017 at MNNIT Allahabad.
- **Attended** a Short-term **GIAN** course on Computational Simulation of Bio-fluid Systems by Prof. Rakesh Mishra, Department of Fluid Dynamics, University of Huddersfield, UK, December 1-12, 2016 at MNNIT Allahabad.
- **Attended** a Short-term **GIAN** course on Medical Imaging by Dr. Gunjan Agarwal, Department of Biomedical Engineering, Ohio State University (OSU), Columbus, USA, July 4-15, 2016 at MNNIT Allahabad.

Personal Details:

Father's Name : Shri Anand Shekhar Giri
Date of Birth : 22 – Aug – 1989
Sex : Female
Martial Status : Single
Nationality : Indian
Permanent Address : 24 ADA Flats, Ashok Nagar, Allahabad-211001, Uttar Pradesh.
Languages Known : English & Hindi
Software Skills : OpenSim, MATLAB/Simulink, SimMechanics, COMSOL Multiphysics.
Hobbies : Sketching and painting, Gardening, Reading books

REFERENCES:

Prof. R.P. Tewari
Professor,
Department of Applied Mechanics,
Motilal Nehru National Institute of Technology,
Prayagraj-211004, UP, INDIA
Email: rptewari@mnnit.ac.in
Phone: +91-9450603682

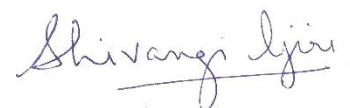
Dr. Basant Kumar
Associate Professor,
Department of Elec. & Comm. Engineering,
Motilal Nehru National Institute of Technology,
Prayagraj-211004, UP, INDIA
Email: singhbasant@mnnit.ac.in
Phone: +91-9452196139

DECLARATION

I hereby declare that all the above details furnished by me are true and correct to the best of my knowledge and belief. I understand that the organization can take action against me if I am found to be guilty of furnishing any wrong information.

Date : 14th February, 2024

Place : Raipur

A handwritten signature in cursive script, reading "Shivangi Giri". The signature is written in black ink and is positioned above a horizontal line.

(Shivangi Giri)