

# RESUME

## GIRISH SHANKAR MISHRA

Assistant Professor

Department of Electrical, Electronics and Communication Engineering

GITAM (Deemed to be University), Bengaluru Campus,

NH - 207, Nagadehalli, Bengaluru Rural Dist.

Daddaballapur – 562163, India.

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### Career Objective:

Seeking excellence in the chosen professional field through self-motivation, hard work and augmentation of core skills required to effectively deliver goods. Striving to achieve excellence through selective and focused pursuit of the short and long-term goals and trying to create an environment through my chosen organization and work field where knowledge and excellence are given their due.

### Educational Qualification:

- Bachelor of Engineering (B.E.) in B.P.U.T (Fakir Mohan University), Odisha, India (73.57%) August 2001 - April 2005.
- Master of Engineering (M.E.) in Jadavpur University, Kolkata, West Bengal, India (80.17%) July 2011 – May 2013.
- Ph.D in VLSI (Nanodevices) (Continuing) in GITAM (Deemed to be University), Bengaluru, India. December 2019 – till date under the guidance of Dr. Arun Kumar M.

### Ph.D Status (In GITAM):

- Ph.D-Mock Pre-talk (Completed) – dated on 27th May 2024
- Ph.D Pre-talk (Completed) – dated on 27th June 2024
- Thesis submission – dated on 31st July 2024

### Technical Skills:

- Vivado Software (VHDL, Verilog)
- Sentaurus TCAD
- Programming on FPGA Board

### Research Interest:

VLSI and Nanodevices, Nanoelectronics, Biosensors

**Teaching Areas:**

Network Theory and Analysis, Control System Engineering, Introduction to VLSI Design, Digital Design with Verilog

**Lab Courses Taught:**

Digital Electronics Laboratory, Introduction to VLSI Design Laboratory, Digital Design with Verilog Laboratory

**Publication Details:**

ORCID ID: <https://orcid.org/0000-0002-6109-1896>

Scopus web link: <https://www.scopus.com/authid/detail.uri?authorId=57542456100>

Google Scholar link: <https://scholar.google.com/citations?hl=en&user=vosLcyEAAAAJ>

h-index: 3, i10-index: 2, Citations: 214

**Research Publications: Conference – 04, Scopus – 05, SCIE - 02**

**International/National Conferences/Journals:**

1. Nilanjan Dey, **Girish Shankar Mishra**, Sheli Sinha Chaudhuri, “Wavelet based watermarked normal and abnormal heart sound identification using spectrogram analysis”, International Conference on Computational Intelligence and Computing Research, ICCIC – 2012, 978-1-4673-1343-8/12/\$31.00 ©2012 IEEE.
2. Siddhartha Sankar Nath, **Girish Shankar Mishra**, Nilanjan Dey, “A survey of Image Classification Methods and Techniques”, International Conference on Control, Instrumentation, Communication and Computational Technologies, ICCICCT – 2014, 978-1-4799-4190-2/14/\$31.00 ©2014 IEEE.
3. Nehru Kandasamy, Dr. N. Mohan Kumar, Nagarjuna Telagam, **Girish Shankar Mishra** “Analysis of Self Checking and Self Resetting Logic in CLA and CSA Circuits Using Gate Diffusion Input Technique”, Second International Conference on Smart Systems and Inventive Technology (ICSSIT 2019) IEEE Xplore Part Number: CFP19P17-ART; ISBN:978-1-7281-2119-2.
4. N. Mohankumar, **Girish Shankar Mishra**, M. Arun Kumar, R. Poornachandran, “Performance of Gate Engineered Symmetric Double Gate MOS Devices and circuits for ultra-low power Analog and RF applications”, International Journal of Advanced Trends in Computer Science and Engineering, Vol. 9, No. 2, Pages:1239 -1246, April 2020. (IF – 2.125).
5. N. Mohankumar, **Girish Shankar Mishra**, Kakarla Sunil, M. Arun Kumar, Poola Puneeth, R V Charan, R. Poornachandran, D.Godwinraj ” InGaN based HEMT with Quaternary barrier for High Breakdown and RF applications”, Journal of Xi'an University of Architecture & Technology (ISSN No : 1006-7930) Volume XII, Issue VI, 2020, Page No: 1876- 1883.

6. **Girish Shankar Mishra**, Mohankumar N, Mahesh V, Vamsidhar Y, Kumar M. Arun, “Compact Modeling of Schottky Gate-all-around Silicon Nanowire Transistors with Halo Doping”, (2022) Silicon, 14 (4), pp. 1455 - 1462, DOI: 10.1007/s12633-020-00936-x. (IF – 3.4)
7. Sujatha, G. Mohankumar, N. Poornachandran, R. Kumar, R. Saravana, **Girish Shankar Mishra**, “Noise Characterization of InAs Based Composite Channel DG -MOSHEMT with Different Gate Dielectrics”, (Silicon, (2022), 14, 5, (1925-1933), 10.1007/s12633-021-00954-3. (IF – 3.4)
8. Poornachandran, R, Mohankumar, N, R. Saravana, Sujatha, G., **Girish Shankar Mishra**, “Influence of HfAlOx in DC, RF and Microwave Noise Performance of Dual-Channel Single-Gate InAs MOSHEMT”, Journal of Electronic Materials, 2021, ISSN: 03615235, <https://doi.org/10.1007/s11664-021-08845-4>. (IF – 2.1)
9. **Girish Shankar Mishra**, N. Mohankumar, S. K. Singh, M. Vamsi and D. S. Reddy, "CV Analysis and Linearity Performance of InGaN Notch Dielectric Modulated Dual Channel GaN MOSHEMT for Reliable Label-free Biosensing," 2022 IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, India, 2022, pp. 235-240, doi: 10.1109/EDKCON56221.2022.10032882.
10. **Girish Shankar Mishra**, N. Mohankumar, Sankalp Kumar Singh, “Impact of InGaN notch on sensitivity in dielectric modulated dual channel GaN MOSHEMT for label-free biosensing,” Current Applied Physics, Volume 49, 2023, Pages 83-90, ISSN 1567-1739, <https://doi.org/10.1016/j.cap.2023.01.014>. (IF – 2.4)
11. **Girish Shankar Mishra**, N. Mohankumar, Sankalp Kumar Singh, “Sensitivity improvement in gate engineered technique dielectric modulated GaN MOSHEMT with InGaN notch for label-free biosensing”, Engineering Research Express, Volume 6, 2024, Pages 025309, <https://dx.doi.org/10.1088/2631-8695/ad3d32>. (IF – 1.7)

#### **Book Chapters:**

1. A book chapter in “Advanced Indium Arsenide-based HEMT Architectures for Terahertz Applications” by Dr. N. Mohankumar, 2021, CRC Press, Taylor & Francis Group, LLC, 6000 Broken Sound Parkway NW, Suite 300, Boca Raton, Florida 33487, U.S.A
2. A book chapter in “Advanced Nanoscale MOSFET Architecture: Current Trends and Future” by Dr. Angsuman Sarkar, May 2024, Wiley, <https://doi.org/10.1002/9781394188970.ch9>.

#### **Achievements:**

1. Felicited for Training and Placement Activities from Training and Placement department of GITAM, Bengaluru Campus in 2018.
2. Felicited for Training and Placement Activities from Training and Placement department of GITAM, Bengaluru Campus in 2019.
3. Felicited for Training and Placement Activities from Training and Placement department of GITAM, Bengaluru Campus in 2020.

4. Felicitated for Mentor Coordinator for GITAM School of Technology, GITAM, Bengaluru Campus in 2020-21.
5. Felicitated for Mentor Coordinator for GITAM School of Technology, GITAM, Bengaluru Campus in 2021-22.
6. Felicitated for Mentor Coordinator for GITAM School of Technology, GITAM, Bengaluru Campus in 2022-23.
7. Felicitated for Mentor Coordinator for GITAM School of Technology, GITAM, Bengaluru Campus in 2023-24.

**Professional Experience:**

<b>From June 2017 to till date:</b>	<b>Assistant Professor</b> Department of Electrical, Electronics and Communication Engineering, GITAM (Deemed to be University), Bengaluru Campus, Nagadenahalli, Doddaballapur, Karnataka, India.
<b>From July 2007 to June 2017:</b>	<b>Assistant Professor</b> Department of Electronics and Telecomm. Engineering Balasore College of Engineering and Technology, Balasore, Odisha, India.
<b>From July 2006 to Oct. 2007:</b>	<b>Lecturer</b> Department of Electronics and Telecomm. Engineering Satyasai Engineering College, Balasore, Odisha, India.
<b>From Sept. 2017 to till date :</b>	<b>Expert (Question and Answering)</b> CHEGG INDIA
<b>From Oct. 2018 to till date :</b>	<b>Question and Answer Setter</b> HireMee Question Management System

**Workshops/Seminars/Conferences/FDP Attended:**

1. Short Term Course on “VLSI Design and Related CAD Tools”, NIT Rourkela, Odisha, June, 2010.
2. Short Term Course on “Winter School on VLSI design”, BIT MESRA, Ranchi, Dec, 2011.
3. 2012 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC - 2012), Coimbatore, Tamil Nadu, Dec, 2012.

4. National Seminar on Speech Signal Processing and its Applications (SSPA - 13), BCET, Balasore, Odisha, Sep, 2013.
5. Two Days Workshop on Outcome Based Education and Learning Centric Approaches at School of Technology, GITAM, Bengaluru, June, 2018.
6. Faculty Development Program in Artificial Intelligence at NASSCOM Futureskill, Bengaluru, June, 2019.
7. Three Days IBM career education program at IBM CE – Foundation course in Python, Bengaluru, January, 2020.
8. Faculty Development Program on Design, Development and Delivery of MOOCs, GITAM, Visakhapatnam, January, 2020.
9. Faculty Development Program on Productivity Tools for Teaching Enhancement, GITAM, Visakhapatnam, April, 2020.
10. Two days virtual workshop on Intellectual Property Rights (IPR), Tamilnadu State Council for Science and Technology, Chennai, June 2020.
11. 2022 IEEE Electron Device Kolkata Conference (2022 IEEE EDKCON) Kolkata, West Bengal, Nov. 25-27, 2022.
12. 2024, INDISCON (IEEE conference), Punjab Engineering College, Chandigarh, Aug. 22-24, 2024.

#### **References:**

1. **Dr. M. Arun Kumar**  
Associate Professor,  
Ph. D Guide  
Dept. of Electrical, Electronics and Communication Engineering,  
GITAM (Deemed to be University), Bengaluru.  
[amanohar@gitam.edu](mailto:amanohar@gitam.edu)  
Mob. 7708587758
2. **Dr. Sheli Sinha Chaudhuri**  
Associate Professor, M.E. Guide  
Dept. of Electronics and Telecommunication Engineering,  
Jadavpur University  
[shelism@rediffmail.com](mailto:shelism@rediffmail.com)  
Mob. 09830111930, 09831143498

#### **Favorable Personality Traits:**

Commitment to work, adaptability and goal-oriented person, problem-solving abilities, Comfortable with teamwork, good coordination and persuasion skills.

**Personal Information:**

**Date of Birth** : 5<sup>th</sup> April 1982  
**Marital Status** : Married  
**Category** : General  
**Nationality** : Indian  
**Current Status** : Assistant Professor,  
Department of Electrical, Electronics & Communication Engineering,  
GITAM (Deemed to be University), Bengaluru Campus,  
Nagadenahalli, Doddaballapur, Karnataka - 562163, India.  
**Present Address** : Girish Shankar Mishra.  
Venkatachalia Building, N S Infocity 2,  
Nagadenahalli, Scout Camp Road, Doddaballapur, Karnataka - 562163,  
India.  
**Permanent Address** : C/O- Niranjana Mishra. At/Po – Chandanpur, Vill – Biranarsinghpur,  
Dist – Puri, Ph. No – 9437397767, 7676960865.  
**Languages Known** : English, Hindi & Oriya  
**Hobbies** : Reading, Traveling & Watching movies  
**Indoor/Outdoor games**: Chess, Carom, Cricket

**Declaration:**

I do hereby declare that all the information furnished above is true to the best of my knowledge and belief.



Place: Bengaluru.

Girish Shankar Mishra.