

Work Address

Dream Institute of Technology

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DR. ABHISHEK SAHA

Objective

Upgrading the educational process and ensuring an interactive environment in which teaching, research, training, upgrading skills and practical applications are integrated so that the student's experience is enriched.

Experience

August, 2008 to August, 2010 **Dream Institute of Technology**

Lecturer in *Electronics and Communication Engineering Department*

August, 2010 to October, 2017 **Dream Institute of Technology**

Assistant Professor in *Electronics and Communication Engineering Department*

October, 2017 to January, 2024 **Dream Institute of Technology**

Assistant Professor (Grade II) in *Electronics and Communication Engineering Department*

January, 2024 to till date **Dream Institute of Technology**

Associate Professor in *Electronics and Communication Engineering Department*

July, 2011 to August, 2015 **University of Calcutta (Rajabajar Campus)**

Worked as a guest lecturer at *Department of Applied Physics*

July, 2007 to July, 2008

Maharaja Manindra Chandra College

Worked as a part time lecturer at *Department of Electronic Science*

Present Status

- Presently working as **Associate Professor** in ECE Department, **Dream**

Institute of Technology.

Education

Ph.D (Tech.) from **National Institute of Technology, Mizoram**
Thesis Title, “Investigation and Analysis of GaN based FETs in Nano Regime for Bioelectronics and Biosensing Applications”

M.Tech in Microelectronics & VLSI Technology
West Bengal University of Technology (*in house*) now known as **Maulana Abul Kalam University of Technology**, Kolkata, West Bengal in 2009

M.Sc. in Electronic Science, University of Calcutta in 2007

B.Sc in Electronic, University of Calcutta in 2004

Software Proficiency

VHDL, VERILOG, PSPICE, TSPICE, MATLAB, Atlas of Silvaco, Medici of Synopsys

Professional Membership

- International Association of Engineers (IAENG)
- IEEE Member

Workshop Attended

- Participated in the Workshop on ‘Introduction to VLSI Design Flow with Synopsys’ Tools’ organized by *West Bengal University of Technology*, 2007
- IEEE Workshop on ‘Recent Trends in Image and Video processing’ organized by *West Bengal University of Technology*, 2008
- Participated in the Workshop on ‘Android Tools’ organized by *Dream Institute of Technology*, 2012
- Attended one-day seminar on ‘MATLAB for Data Analytics and Computer Vision’ organized by MATHWORKS, September, 2015
- Participated in the NPTEL SPOC workshop at *IIT-K*, January, 2018
- Participated in the SWAYAM-NPTEL SPOC workshop at *IIT-K*, July, 2018
- Participated in the SWAYAM-NPTEL SPOC workshop at *IIT-K*, February, 2019

Workshop Organized

- Organized Android Workshop in Association with IIT-Guwahati, November, 2013
- Organized ‘Space Technology Awareness Camp in Association with Space Technology Students’ Society, 2017
- Organized **IEEE-EDS** sponsored Faculty Outreach Program, August, 2019
- Organized one-day webinar on ‘*Advances in Tracking RADAR Systems for Test Range Application*’ in collaboration with **IEEE-MTT-s SBC** and **Jadavpur University**, July, 2020.
- Organized **IEEE-SPS day**, May, 2024.
- Organized 5 day FDP in Collaboration with **IEEE-SPS**, March, 2025.

Job Profile

- Associate Professor in ECE Department, *Dream Institute of Technology*.
- Former HOD (in charge) of Department of ECE, Dream Institute of Technology.
- Departmental **Convenor**, Department of ECE, Dream Institute of Technology.
- **NBA Coordinator**, Dream Institute of Technology.
- **SPOC SWAYAM-NPTEL Local Chapter**, *Dream Institute of Technology*.
- **Routine Committee** Convener, *Dream Institute of Technology*.
- **Institute's Nodal Officer**, *Swachh Bharat Abhiyan Summer Internship Program*.
- Project Co-Ordinator Unnat Bharat Abhiyan (Coordinating institute IIT-Delhi).
- **IQAC Co-ordinator**
- **Governing Body (GB) Member** of Dream Institute of Technology.

Publication

- 1) **Abhishek Saha**, Rudra Sankar Dhar, Subhro Ghoshal, “A Comparative study of GaN and Si based SOI FinFET” in International Conference on Computational Techniques and Applications (ICCTA, 2021)
- 2) **Abhishek Saha**, Vedatrayee Chakraborty, “Simple Gain Model of Group III-V Semiconductor based Laser Diode” Recent Trends in Electronics & Communication Systems, ISSN: 2393-8757 Volume 7, Issue 3, pp 9-27.
- 3) **Abhishek Saha**, Vedatrayee Chakraborty, “Comparative study of Drain Current of Symmetric and Asymmetric DGMOSFET with Simulation in Silvaco TCAD Software” in Journal of Semiconductor Devices and Circuits, ISSN: 2455-3379, Volume 8, Issue 1, pp 1-14, 2021
- 4) Sourav Mukherjee, **Abhishek Saha**, Madhuchanda Mitra, ‘ECG Feature Extraction: Lagrange Five Point Interpolation and Hilbert Transform Based Approach’ at NaCCS, 2012. (Bardhaman University)
- 5) **Abhishek Saha**, Sneha Singh, Rudra Sankar Dhar, Kajjwal Ghosh, AY Seteikin, Amit Banerjee, IG Samusev, “Exploration and Analysis of GaN-Based FETs with Varied Doping Concentration in Nano Regime for Biosensing Application” in *Biosensors*, vol. 15, issue. 9, Page. 613 in 2025.
- 6) **Abhishek Saha**, Rudra Sankar Dhar, Saurav Ghosh, Mousam Chatterjee, “Electrical Characteristics and Sensitivity Performance Analysis from Planar MOSFETs to FinFETs in III-V Semiconductor Technology” in *Sensors & Transducers*, vol. 269, issue.2, pages. 30-39 in 2025.
- 7) Sneha Singh, **Abhishek Saha**, Rudra Sankar Dhar, Falah Awwad, Mousa I Hussein, “Temperature Sensitivity Effects and RF Analysis of High-K Wrapped Spacer Induced GaN based Gate-All-Around FETs” in *Materials Today Electronics, Elsevier*, page. 100214 in 2026.
- 8) Saurav Ghosh, Vedatrayee Chakraborty, Swagata Dey, **Abhishek Saha**, Rudra Sankar Dhar, “A Study on a Front Illuminated GePb/GeSiPb based Barrier-well-barrier Heterostructure at High Frequency Region Using SILVACO TCAD” in *Sensors & Transducers*, vol. 271, issue.4, pages. 78-85 in 2025.
- 9) Potaraju Yugender, Kuleen Kumar, Rudra Sankar Dhar, **Abhishek Saha**, “Development and Analysis of Nanosheet FETs for Faster Switching Application” in *Sensors & Transducers*, vol. 270, issue.3, pages. 97-108 in 2025.

Subject taken in UG Level

- Basic Electronics
- Digital Electronics
- Analog Electronic Circuit
- Solid State Device
- Microelectronics & VLSI Design
- EDA for VLSI Design

Subject taken in PG level

- VLSI Device & Modelling
- Digital IC design
- Analog IC design
- CAD tools for VLSI Design
- Low power VLSI design

