

SANDEEP RANA

Assistant Professor ECE

Qualifications: M. Tech., B. Tech.

Area of Interest: Analog Signal Processing, Control System

Contact No.: 9997059553

Email id: sandeep.rana@gbpec.ac.in (official), srana231@gmail.com (Personal)



CURRICULUM VITAE

Work Experience (Total :)

- Assistant Professor at G.B. Pant Institute of Engineering and Technology, Pauri Garhwal, Department of Electronics and Communication Engineering from May 2nd, 2019 to present.
- Engineer (Control & Instrumentation) at Rajasthan Rajya Vidhyut Utpadan Nigam Limited, Rajasthan from November 2018 to April 2019.
- Assistant Professor- Adhoc at Netaji Subhash University Of Technology, New Delhi, Department of Instrumentation & Control Engineering from August 2018 to November 2018.
- Assistant Professor at Graphic Era Hill University, Dehradun, Department of Electronics and Communication Engineering from August 2014 to December 2016.

Research Interests:

- Analog Signal Processing
- Control System

Education:

- Master of Technology (M.Tech.) in Control & Instrumentation from Department of Electrical Engineering, Delhi Technological University (Formerly DCE), Delhi, India, in 2014.
- Bachelor of Technology (B.Tech.) in Electronics and Communication Engineering from Graphic Era University, Dehradun India in 2012.

Administrative Experience:

1. Member of Departmental Board of Studies, Department of Electronics & Telecommunication Engineering, G.B Pant Institute of Engineering and Technology, Pauri Garhwal, India held on 27/09/2019.
2. NIRF committee member

Research Publications:

Journal Papers:

1. K. Kumawat, S. Rana, A. Sharma, "Design and Implementation of PID controller for second order plant and comparison of its performance with Fuzzy Logic based Controller", International Journal of Electronic and Electrical Engineering (ISSN 0974-2174), Volume7, Number 1, pp.19-24, 2014.

Conference Papers:

1. S. Rana, A. K. Kumawat and P. Kumar, "A Universal Current Mode KHN Biquad Filter using Voltage Differencing Current Conveyor," IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), p.1-5, 2016. DOI: [10.1109/ICPEICES.2016.7853506](https://doi.org/10.1109/ICPEICES.2016.7853506)
2. S. Rana, A. K. Kumawat and P. Kumar, "Dual output Voltage Differencing Buffered Amplifier based Wave Active filter," IEEE UP Section International Conference on Electrical Computer and Electronics (UPCON), p.1-6, 2015. DOI: [10.1109/UPCON.2015.7456736](https://doi.org/10.1109/UPCON.2015.7456736)

Short-Term Courses and Conference Organized:

1. Two weeks online FDP on **Recent Research Trends in Electronics & Communication Engineering**, 18th - 28th August, 2020, Department of Electronics & Communication Engineering, G. B. Pant Institute of Engineering & Technology, Pauri Garhwal as a Coordinator.
2. Two weeks online Industrial Training on **Current Industry Scenario**, 29th July -9th August, 2020, Department of Electronics & Communication Engineering, G. B. Pant Institute of Engineering & Technology, Pauri Garhwal as a Coordinator.
3. International Conference on **Smart Machine Intelligence and Real-Time Computing**, 26th -27th June, 2020, Department of Electronics & Communication Engineering, Department of Electrical Engineering and Department of Computer Science Engineering, G. B. Pant Institute of Engineering & Technology, Pauri Garhwal as an Organising Committee member.
4. One week Workshop on **Antenna: Design, Fabrication & Measurement Techniques**, 25th-29th November,2019, Department of Electronics & Communication Engineering, G. B. Pant Institute of Engineering & Technology, Pauri Garhwal as a Coordinator.
5. One week Short-Term Course on **FPGA and Mentor Graphics TOOL**, 10th – 14th Oct 2019, Department of Electronics & Communication Engineering, G. B. Pant Institute of Engineering & Technology, Pauri Garhwal as a Co-Coordinator
6. **IEEE International Conference on Emerging Trends in Communication Technologies** organized by Department of Electronics & Communication Engineering, Graphic Era University and Graphic Era Hill University held at Graphic Era University Dehradun during 18th -19th November, 2016, as an Organising Committee member.

Subjects Taught:

1. Network Theory (B.Tech.)
2. Voice and Data Network (M. Tech.)
3. Communication System (B.Tech.)
4. Advance Digital Signal Processing (B.Tech.)

Ph. D. Thesis Supervision: Nil

M. Tech. Thesis Supervision: Nil

Awards & Honors:

- Awarded with **Best Paper Award** for the research paper titled “**Dual output Voltage Differencing Buffered Amplifier based Wave Active filter**,” in IEEE UP Section International Conference on Electrical Computer and Electronics (UPCON) held at Indian Institute of Information Technology Allahabad (IIIT-A), India during 04-06 December 2015.
- Successfully completed and received an **Honor Code Certificate** in an online course “**6.002.1x: Circuits and Electronics 1: Basic Circuit Analysis**” offered by the **Massachusetts Institute of Technology** through edX.

Professional Activities:

Professional Affiliation:

1. Member, the Institute of Electrical and Electronic Engineers (IEEE)
2. Branch Advisor, IEEE GBPIET Student branch Chapter