**NISHTHA RANI**

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**EDUCATION**

**Indian Institute of Technology (ISM)** Dhanbad, India

M. Tech in Electronics and Communication Engineering, CGPA: 9.67/10Jul 2014 - May 2016

**Shaheed Bhagat Singh State Technical Campus** Ferozepur, IndiaB.Tech in Electronics and Communication Engineering, Percentage: 77.2% Jul 2009 - Jun 2013

**WORK EXPERIENCE**

**Galgotia College of Engineering and Technology** Greater Noida, India

Assistant Professor(ECE Department) Aug 2016 - June 2019

* Courses taught: Microprocessor and its applications, Analog and digital electronics, Analog communication, IC Design and various labs.
* Mentor students in research projects.
* Chief Editor of departmental newsletter and magazines.
* Served on academic and administrative committees as assigned.
* Actively participated in department groups and collaborated with other faculty members in the accreditation process.

**Indian Institute of Technology (ISM)** Dhanbad, India

Teaching Assistant (ECE Lab) Jun 2015 - May 2016

* Assisted Professor with undergraduate and graduate lab courses.
* Created assignments, quiz and evaluate them.

**ACADEMIC PROJECTS**

**Study &Design of Memristor & analog filter using CM Building blocks**, IIT(ISM), DhanbadMay 2015-May 2016

* Design of new memristor emulator and various types of filters using current mode blocks evaluated through PSpice simulation and Experimental verification.
* Significantly improves its cost, complexity, power consumption, size, and frequency.

**Data Transmit & Receive using Bluetooth Module,** SBSSTC, Ferozepur Jan 2013-May 2013

* Design of wireless data transmission and reception between two or more microcontrollers using Bluetooth Module.
* Used to keep track of data from a device, or a sensor located in a remote location from the point where it is processed.

**Challan Paying System,** SBSSTC, Ferozepur May 2012-Dec 2012

* Design and development of the automatic challan system using the Atmel’s AT89C51 microcontroller and programming is done using Keil software.
* Used to check for any signal break by any vehicle.

**TECHNICAL SKILLS**

**Programming Skills:** Assembly language, VHDL, C++

**EDA Tool:** MATLAB Simulink, OrCAD-Capture CIS (SPICE Modelling), Xilinx ISE, Tanner EDA, PSpice

**PAPER PUBLICATIONS**

* Rajeev Kumar Ranjan, **Nishtha Rani**, Ratnadeep Pal, Sajal K. Paul and Gaurav Kanyal, “Single CCTA based high frequency floating and grounded type of incremental/ decremental memristor emulator and its application”, Microelectronics Journal 60 (2017) 119–128.
* Rajeev K Ranjan, Surendra Sagar, Subrato Roushan, Bharti Kumari, **Nishtha Rani**, Fabian Khateb, “High-frequency Floating Memristor Emulator and its Experimental Results”, IET Circuits, Devices & Systems 13 (3), 292-302, 2018.
* Rajeev Kumar Ranjan, Kundan Kumar, **Nishta Rani** and Sajal K. Paul, “A Powerline Filter Circuit Design for Biomedical Applications”. Journal of Computational and Theoretical Nanoscience, Vol. 13, 3345–3351, 2016.
* **Nishtha Rani**, Rajeev Kumar Ranjan, Ratnadeep Pal and Sajal K. Paul, “Programmable and Electronically Tunable Voltage-mode Universal Biquadratic Filter using Simple CMOS OTA”, Proceeding of 2nd IEEE International Conference on Devices, Circuits and Systems (ICDCS’16) Coimbatore, India, March 3-5, 2016.

**ACHIEVEMENTS AND SERVICES**

* Attended five days faculty development programme on “Analog Integrated Circuit Design using Cadence Analog Design Flow” held at JSS Academy of Technical Education, Gr. Noida from 27th August to 1s September 2018.
* Attended five days faculty development programme on “Advances in Communication and Networking” held at GCET, Gr. Noida on 17 - 21, July 2017.
* An indispensable member of organizing team of Two days national seminar on “Emerging Microwave Remote Sensing Technology for Rural Applications in India” held at GCET, Gr. Noida on 30-31 March 2017.
* An indispensable member of organizing team of Annual Convocation held at GCET, Gr. Noida on 19th March 2017.
* An indispensable member of organizing team of National seminar on “Empowering Young Entrepreneurs in India” held at GCET, Gr. Noida on 5Th October 2016.
* Attended national workshop on ‘Recent Research Trends in Nanoscale Devices, Circuits and Systems’ held at Karunaya University, Coimbatore, India, March 3-5, 2016.
* Secured 3rd rank in M.Tech (ECE).
* Secured 97.6 percentile in GATE (Graduate Aptitude Test in Engineering) – 2014 and 98.7 in GATE 2017.
* Achieved appreciation letter from college for 100% result in the subject “Microprocessor & its Applications" taught.
* Volunteered at “Kartavya”, an NGO run by ISM students for poor underprivileged students.
* Volunteered in “Hardware Interfacing with Simulink” workshop organized by ISTE Branch, Shaheed Bhagat Singh State Technical Campus, Ferozepur.

**REFERENCES**

* Prof. Sajal K Paul, Professor & Dean, IIT (ISM) Dhanbad, [**sajalkpaul@rediffmail.com**](mailto:sajalkpaul@rediffmail.com)**.**
* Assoc. Prof. Jitender Kumar, IIT (ISM) Dhanbad, [**jitendra@iitism.ac.in**](mailto:jitendra@iitism.ac.in)**.**