ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

Electronic and Communication Engineering (ECE) is a branch of engineering that deals with the design, development, and testing of electronic devices, circuits, and communication systems.

This field involves the use of electrical and electronic components to transmit and receive information, signals, and data.Some of the core subjects studied in ECE include digital electronics, analog electronics, communication systems, control systems, signal processing, microelectronics, electromagnetic theory, and power electronics.

International Journal

International Journal Publication

1. **Santimoy Mandal** and Chandan Kumar Ghosh. (2024) “Design and Analysis of a Coupled-Feed, Reconfigurable Antenna for 4G LTE Communication System” in International Journal of Microwave and Wireless Technologies, Cambridge University Press. Communicated (SCI).

2. Srivastava, Mayank, Ajay Kumar, Kapil Bhardwaj, **Sushanta Mahanty**, Devesh Kumar Srivastava, and Ramendra Singh. "Compact and High-Speed All-Optical 2 n: 1 Multiplexer Scheme Using MRRs." Journal of Circuits, Systems and Computers (2023): 2450087.

International Conferences

1. **S. Mandal** and C. K. Ghosh, (2023). "Design and Analysis of a Compact Rectangular Sectored UWB (Ultra-wideband) Antenna for Wireless Communication Applications," International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON), Durgapur, India, 2022, pp. 1-4, doi: 10.1109/MESIICON55227.2022.10093420.

2. **Mahanty, Sushanta,** Ajay Kumar, Ujjwal Sharma, Shalini Kumari, Sujan Adhikary, and Kumari Amrita Pritam. "Design and Implementation of Full Adder using 4 to 1 line Multiplexer Based on Nonlinear Switching Micro Ring Resonator Structure." In 2023 3rd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS), pp. 280-285. IEEE, 2023.

3. Yadav, Ajay, Aiay Kumar, Amit Prakash, **Sushanta Mahanty**, Rakesh Choudhary, and Raj Ranjan Singh. "Implementation of 3-bit asynchronous binary up-down counter using Electro-Optic Effect based Mach-Zehnder Interferometers." In 2023 International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI), pp. 1-4. IEEE, 2023.

4. **Mahanty, Sushanta**, Ajay Kumar, Rakesh Choudhary, Amit Prakash, Ajay Yadav, and Raj Ranjan. "New All Optical Shift Register using Nonlinear Structure." In 2023 3rd International Conference on Advances in Computing, Communication, Embedded and Secure Systems (ACCESS), pp. 263-267. IEEE, 2023.

5. Sharma, Ujjwal, **Sushanta Mahanty**, Ajay Kumar, Sujan Adhikary, Kumari Amrita Pritam, and Shalini Kumari. "Design and Implementation of Full-Subtractor Using 4 to 1 Line Multiplexer Based on Micro Ring Resonator Nonlinear Switching." In 2023 International Conference on Electrical, Electronics, Communication and Computers (ELEXCOM), pp. 1-6. IEEE, 2023.

6. Yadav, Ajay, Amit Prakash, Rakesh Choudhary, **Sushanta Mahanty**, Raj Ranjan Singh, Shiva Nand Singh, and Ajay Kumar. "Realization of MUX, DEMUX and ADD–DROP of Wavelength Using Bragg Grating and Optical Circulator." In International Conference on Recent Trends in Artificial Intelligence and IoT, pp. 314-327. Cham: Springer Nature Switzerland, 2023.

7. K. S. Kamal Kumar, **S. Mahanty**, A. Kumar, N. Kumari, S. Shekhar and O. Wagisha, "Nonlinear Switching Structure-Based All-Optical Modulus-3 Counter," 2023 International Conference on Energy, Materials and Communication Engineering (ICEMCE), Madurai, India, 2023, pp. 1-5, doi: 10.1109/ICEMCE57940.2023.10434059.

8. K. S. K. Kumar, **S. Mahanty**, A. Kumar, N. Kumari, S. Shekhar and O. Wagisha, "All-Optical Realisation of 2-Bit Up Counter Using Nonlinear Switching Structure," 2023 3rd International Conference on Advancement in Electronics & Communication Engineering (AECE), GHAZIABAD, India, 2023, pp. 401-405,doi: 10.1109/AECE59614.2023.10428476.

Book Chapter

1. **Mandal, S.,** & Ghosh, C. K. (2024). Mutual Coupling Reduction in a Patch Antenna Array Using a Microstrip Resonator for Wireless Communication System Applications. In Advances in Microwave Engineering: From Novel Materials to Novel Microwave Applications (pp. 201-212). CRC Press

ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

R.V.S. College of Engineering and Technology has organised a 5 days value added course on “Advanced Arduino and Internet of Things” from 23rd to 28th of December 2023.

The Internet of Things (IoT) refers to the network of interconnected devices embedded with sensors, softwares, and other technologies, enabling them to collect and exchange data.

In our workshop, we have provided students with hands-on experience in designing, programming, and deploying IoT systems. The workshop covered topics like sensor integration, data analytics, and cloud computing. Through practical exercises and projects, students learn to develop innovative solutions to real-world problems.

Overall, the workshop empowers students to become adept problem solvers and innovators in the digital age.