Vaishali Upperwal

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M.Tech - Communication Engineering
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EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
M.Tech	Indian Institute of Technology, Guwahati	6.83 (Current)	2021-2023
B.Tech	Krishna Institute of Engineering & Technology, Ghaziabad	73.76 %	2015-2019
Senior Secondary	R.R.Senior Secondary High School	69.8 %	2014
Secondary	R.R.Senior Secondary High School	85.5 %	2012

EXPERIENCE

- **Amazon** *Apr 2021 - Aug 2021*
  Worked as Quality Associate Hyderabad
  – Operations Technology Support

PROJECTS

- **Performance Analysis of Beyond 5G Wireless Communication Systems** *Aug 2022 - May 2023*
  (M.Tech Project, Guide: Dr. Manoj B.R.,Assistant Professor, Dept. EEE)
  – The project is based on the performance analysis of beyond 5G wireless communication system. Specifically,we consider the intelligent reflecting surface-assisted space shift keying (SSK) modulation and reflection phase modulation (RPS) schemes.We perform the joint detection of SSK and RPM symbols using the optimal detection technique in a realistic fading environment scenario with channel estimation error.The performance metrics of interest are error rate and spectral efficiency analysis.

- **Generation M-PAM , M-PSK and M-QAM In AWGN Channel** *Aug 2021 - Dec 2021*
  (Course Project, Guide Dr. Sudarshan Mukherjee, Assistant Professor, Dept. EEE)
  – The objective of this project is to review the key characteristics and performance of digital modulation schemes. Simulations are used to compare the performance and trade-off of M-ary techniques,including analysis of BER in the presence of Additive White Gaussian Noise(AWGN) using Matlab.

- **Women Safety System Using GPS Tracking and Alerts** *Dec 2018 - May 2019*
  (B.Tech Project, Guide: Ms Pravesh Singh, Associate Professor, Dept. EEE)
  – This detection system is composed of a GPS receiver, Microcontroller and a GSM Modem. GPS Receiver gets the location information from satellites, microcontroller processes this information and this processed information is sent to the user using GSM modem. By pressing that switch, the entire system will be activated and immediately a sms will be sent to concern person with location using GSM and GPS.

TECHNICAL SKILLS

- **Programming**: C, C++*
- **Hardware Description Language** : Verilog
- **Tools** : Matlab , XILINX Vivado
- **Miscellaneous** : LabAlive
- **Operating Systems** : Windows

* Elementary proficiency

KEY COURSES TAKEN

- **Communications**: Wireless Communications, Analog & Digital Communications, Data Communication & Networks, and Communication Systems Simulation Lab.
- **Mathematics**: Probability and Stochastic Processes.
- **Electronics**: Digital Electronics, Signals and Systems.

ACHIEVEMENTS

- **Gate Examination 2021**,cleared ECE paper with 92.63 percentile.

EXTRACURRICULAR

- **NCC**, Worked as a Volunteer in Twenty-Ninth National Conference on Communications held at IITG. *2023*
- **Teaching Assistantship**, Serving as a Teacher Assistant for Basic Electronics Lab under Dr. Shabri Nath. *2022*
- **Business Development Trainee**, Worked in Byjus' Educational Technological Company. *2021*
- **2nd Position**, In flashmob of Prastuti, held at Inter-college level. *2018*