Kritika Tripathi

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EDUCATION

- **Vellore Institute of Technology, Bhopal** *Oct 2021 - Present*
  Bachelor of Technology - Electronics and Communication Engineering CGPA: 8.83
- **Govt. MLB GHSS School Satna** *2021*
  Board of Secondary Education, MP Percentage: 96.8%
- **Govt. Higher Secondary School, Khutaha(Satna)** *2019*
  Board of Secondary Education, MP Percentage: 97.4%

EXPERIENCE

- **Velankani Electronics & Automotive Private Limited, Bengaluru** *June 24 - Nov 24*

Hardware Design Intern - R&D

- Worked on the development of 5-port and 8-port SOHO(Gigabit) Ethernet Switch projects. emphasizing high- speed data transmission and reliability
- Used **Cadence** software for schematic design and MS Excel for Bill of Materials (BOM) preparation
- Selected appropriate components, chips, and **ICs** for the hardware design
- Conducted PCB testing, including visual inspection, voltage testing, and impedance testing, using a multimeter.

PROJECTS

- **Design of SOHO Networking (Gigabit) Switch** *June 24 – Nov 24*
  - Technology: OrCAD/Cadence, Allegro, Lt-spice, Excel.
  - Designed a schematic for a SOHO 5-port and 8-port 1 Gbps Ethernet switch, enabling efficient data transfer in small networks.
  - Incorporated Ethernet ports, DRC check, circuit analysis, Layout analysis, BOM generation, Netlist creation and power management circuits to facilitate high-speed, reliable communication.
- **Employee Performance Prediction WebApp** *Aug 23 – Nov 23*
  - Description: Developed a web application predicting employee performance based on various input parameters, fostering effective workforce management. Leveraged machine learning for insightful productivity forecasts.
  - Technology: Python, Flask, scikit-learn, XGBoost, HTML, CSS.
  - Team Project: 4 members
  - Role: Data preprocessing, ML Model developer.
- **Design and building of smart street light system** *July 22 – Dec 22*
  - Technology: Tinker Cad, Arduino IDE, Arduino UNO, Sensors technology
  - System that saves energy by turning off street lights during the day and adjusting their intensity at night based on the presence of objects
  - Role: Implementation of model

TECHNICAL SKILLS

Languages : MATLAB, JAVA, Python, C Programming
Tools & Software: LT-spice, Tinkercad, OrCAD/Cadence, Allegro/Cadence, Excel, MATLAB, Visual Studio Code

Certifications:

- PCB Design in Cadence basic to Expert Level (Udemy)
- MATLAB Onramp, MATLAB Simulink and MATLAB fundamentals (Math Works)
- Applied machine learning in python (Coursera)

ACHIEVEMENT

Awarded a prestigious 100% scholarship for pursuing B. Tech through “STARS SCHEME”. *Oct 2021*

Selected for INSPIRE Award by virtue of performance within top 1% in the 12^{th} Board exam *May 2021*

ADDITIONAL INFORMATION

- **Languages**: English, Hindi