Kesana Raja Narendra Manikanta

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GitHub Profile
LinkedIn Profile

Education

•ENSEEIHT-INP TOULOUSE *2025-2027*
Masters In Electronic Systems for Embedded And Communicating Applications

• **National Institute of Technology, Andhra Pradesh** *2020-2024*
B.Tech Electrical and Electronics Engineering 7.17 CGPA

• **Sri Chaitanya Jr Boys College, Vijayawada** *2019*
12th Grade 9.65 CGPA

Technical skills

Languages: C/CPP, Assembly Language,Verilog, Python

Tools and Software:Arduino IDE, PlatformIO, Termux,Code Composer Studio, VS Code, LTspice, Linux (basic), MATLAB, LaTex

Coursework: System Design Through Verilog, Machine Learning Specialization-cousera, Database Management, 5G for Everyone-Qualcomm wireless academy

Areas of Interest: embedded systems, Inegrated circuit design,Signal Processing,Cyber Security

Experience

- **FWC IIT Hyderabad** worked on arm-fpga EOSS3 development board using in the verilog and ARM-GCC using mobile termux app to compile the code and woked on Gate digital electronics implemented in FPGA and upload the firmware to ESP32 using mobile PLATFORMIO Envirnonment.Solved the math equation in esp32 using mobile.learned the firmware uploading in ardunio , esp32 using mobile , nvim used to find files easily .solved the maths problems using pointers in cpp and python programming
- **Project Intern IIT Hyderabad** Worked under the gvv sharma sir.solving the digital design problems and implemented sequence detection in ardunio , esp32 using platformio tool to upload the firmware. worked on drone workshops conducted in IIT Hyderabad.Upload the firmware using the mobile and termux as compailer REfer the Github above
- **GEN AI Research Intern – RakFort, Dublin** Conducted research on AI risk assessment and developed vulnerability test cases for Generative AI systems using open source GARAK and Promptfoo.

Projects

- **Autonomous drone** implented the Drone delivery using the pixhawak , pi4 controllers .I had used the Mavlink protocol to uplod the firmware and using mobile connected to pi4 using SSH protocol and VNC viewer to remotely control the drone using mobile .
- **Anomaly Detection and Imputation using deeplearning** Developed machine learning models for anomaly detection and imputation in renewable energy systems.and forecasting using lst,cnn,rnn
- **Line Follower UGV** Autonomous Navigation: Engineered an Arduino-based Unmanned Ground Vehicle (UGV) with autonomous line-following capabilities
- **Bluetooth-Controlled UGV (ESP32)**
  Designed and executed a Bluetooth-controlled Unmanned Ground Vehicle (UGV), integrating ESP32.

Publications:

- **IEEE** $4th$ **International Conference on Sustainable Energy and Future Electric Transportation(SEFET)**
- **Project Title:** Outliers Dection and Imputation in Wind Speed Data and Forecasting using LSTM : eCF Paper Id: SEFET2024-764

Awards and Extra-Curricular Activities

- **SEFET best poster award eCF Paper Id: SEFET2024-764**
- **FRANACE EXECELLENCE CHARPAK MASTERS SCHOLARSHIP HOLDER 2025**

Languages

English, French(A2)

IELTS 6.5