GOKULAN P M

Email : gokulanpm93@gmail.com Phone : 9363078278 LinkedIn : linkedin.com/in/gokulanpm GitHub : github.com/GokulanPM

PROFILE SUMMARY

Electronics and Communication Engineering student with strong foundation in Analog and Digital Electronics, MOSFET operation, Network Theorems, RC circuits, and Amplifiers. Passionate about VLSI and semiconductor device physics with keen interest in Analog Physical Design and layout impact on circuit performance. Seeking to apply circuit-level understanding in advanced technology nodes.

KEY SKILLS AND TOOLS

Core Electronics: Network Theorems, MOSFET Basics, RC Circuits, CMOS Logic, Amplifiers, ADC/DAC
Programming : C, C++, Python
Tools & OS : Linux (Ubuntu), Git, GitHub, MATLAB, Tinkercad
Embedded & Hardware : ESP32, ATmega328, PCB basics, Sensor interfacing, PWM, ADC, Soldering
Additional Exposure : Cloud, Docker, CI/CD pipelines

PROJECTS

Smart Home AC Energy Monitoring System (ESP32 – IoT)
Designed and implemented an AC signal measurement system using voltage divider and current sensing circuits
Applied RMS calculations and filtering techniques for accurate analog signal processing
Analyzed signal noise and implemented filtering methods for stable measurement
Worked extensively with ADC modules for real-time data acquisition
ESP32, MQTT, Node-RED, Embedded C

Line Follower Robot (ATmega328 – Custom Hardware)
Designed analog IR sensor interfacing circuits using voltage comparators
Implemented PWM motor control using microcontroller timers
Analyzed RC response time and sensor threshold behavior
Performed hardware debugging and signal validation using multimeter and oscilloscope
ATmega328, Embedded C, IR sensors, PWM, ADC

CI/CD Automation Pipeline - **GitHub**
Designed and implemented an end to end CI CD pipeline to automate build, test, and deployment workflows
Built Jenkins pipelines to automate deployment of a containerized application
Containerized the application using Docker and managed source code using Git and GitHub
Pushed container images to DockerHub and focused on fast and reliable automated deployments
Jenkins, Docker, Git, GitHub, DockerHub, Python

EDUCATION

Bachelor of Electronics and Communication Engineering
Sri Krishna College of Engineering and Technology
2023 – 2027 | CGPA: 8 / 10
Relevant Coursework : Analog Electronics, Digital Electronics, Electronic Devices, Linear IC, Signals & Systems