

# MANJULA GAVVALA

## EMBEDDED SYSTEMS DEVELOPER (LINUX)

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## About

**Dynamic Associate Engineer** with 1.3 years of experience specializing in Linux device driver development and embedded systems. Proficient in **C programming**, **Linux kernel internals**, and **ARM-based SoCs**.

Skilled in debugging, multi-threaded programming, and developing robust driver solutions for peripherals and subsystems. Adept at collaborating with cross-functional teams and delivering high-quality embedded software solutions.

## Education

### Bachelors of Technology - ECE

Madanapalle Institute of Technology & Science  
2019 - 2023

### Higher Secondary/Diploma – Science (XII)

Glennwood University  
2017 - 2019

### Secondary School Education (X)

Bellows College  
2017

## Experience

### Interex Semiconductors

#### Project:

INTEREX DATA Centre Board Management Card work Experience

#### 2023 – Till date

- Involved in Linux and u-boot bring-up on Virtual and Silicon Platform.
- Implemented Bare Metal for driver from the scratch for SPI, PCIe, Tacho Meter and Nor-Flash.
- Involved in driver bring up in Linux Platform for SPI, PCIe and Tacho Meter.
- Implemented platform device driver for Tacho Meter.
- Added stability Testcases for Tachometer.
- Involved in driver bring up in Linux Platform for SPI, PCIe and Tacho Meter.
- Implemented platform device driver for Tacho Meter.

### Industrial Training & Certifications

- Embedded Systems Certification, Moschip Institute of Silicon Systems
- Hands-on training in device driver development for ARM SoCs.

## Technical Skills

- **Programming Languages:** C, Python, Bash
- **Operating Systems:** Linux, Android, Open BMC
- **Architectures:** ARM32/64, RISC-V
- **Boards & SoCs:** RPI3, BeagleBone Black, NanoPI M3, INTX2401
- **Subsystems & Protocols:** I2C, UART, GPIO, USB, PCI, SPI, PCIe
- **Debugging Tools:** JTAG, GDB, Lauterbach, Oscilloscope, Protocol Analyzers
- **Development Tools:** Git, Jira, Buildroot, Yocto, Confluence.
- **Build Systems:** Buildroot, Yocto
- **Concepts:** Multi-threading, IPC, RTOS concepts, Linux Kernel Internals