

JAMMULA MURALI KRISHNA

Email: muralikrishnajammula21@gmail.com

Ph: +91 6300434597

Objective

To establish a career in a company where I can utilize professional skills and knowledge to be an effective embedded software developer and inspiration to those around me.

Summery

- Proficient in Embedded C programming with hands-on experience in microcontroller-based system development.
- Extensive experience in hardware debugging and sensor integration.
- Experience on STM32F401RBT6 micro controller.
- Experience on Raspberry Pi 5 Board and system development.
- Proficient in generating custom operating systems using the Yocto Project tailored for GUI and specific requirements.
- Experience with Yocto Project, particularly in the Kirkstone branch, for building custom Linux distributions.
- Experience on hardware debugging using ST link V2 Debugger.
- Experience on communication protocols.
- Experience on Linux system programming (LSP).
- Experience on shell scripting.
- Experience on Free RTOS
- Covered basic concepts related to device drivers, including character drivers, single driver access for multiple devices, and practical programming.
- Experience in IMX6 booting, including generating U-Boot and kernel images
- Experience on Debugging Tools GDB.

Skill Set

Programming Language: C, Shell Scripting,

Operating system: Windows, Linux.

Communication Protocol: UART, I2C, SPI.

Software Tools: STM32 Cube IDE, STM32Cubemx, ARM Keil, GIT HUB,

Platforms: STM32F401RBT6, Raspberry Pi 5

Other Tools: Yocto Project (Kirkstone branch), Dock light, Serial Debug Assistant

Soft Skills: Quick learner, Communication, Leadership, Work ethic, Hardworking, Dedicated.

Experience

People Tech Group | August 2024 – Present

Role: Embedded Software Engineer

Responsibilities:

- Integrated various sensors, W25Q64 SPI Flash Module, BH1750 Light Intensity Sensor Module, stepper motor, and WQ25 memory device with Raspberry Pi 5 for real-time data collection and processing.
- Developed a custom OS using the Yocto Project (Kirkstone branch) to meet specific GUI and functional requirements.
- Implemented USB SSD booting for improved system performance and reliability.
- Enabled display sleep and wake-up functionality in the Yocto environment for power efficiency.

Education Qualification

Kernel Masters, Hyderabad | 2023

6 months training in Kernel Masters

Sri Chaitanya Technical Campus , ibrahimpatnam | 2020 – 2023

B. Tech (EEE) | CGPA - 7.56

SG Govt. Polytechnic, Adilabad | 2017 – 2020

Diploma (EEE) | 88.8%

Little Flower High School,Thorrur | 2016-2017

SSC | GPA - 8.3

Projects

- **IOT Based Smart Weather Monitoring System**

Hardware: STM32F401RBT6, ESP8266, LM35, 16x2 LCD.

Development Platform: STM Cube IDE, STM Cube MX, Dock light, Serial Debug Assistant, KEIL micro vision.

Description: Collecting data from LM35 sensors and displaying on 16x2 LCD and uploading data to Cloud Server.

- **System Integration and Customization on Raspberry Pi 5**

Hardware: Raspberry Pi 5, W25Q64 SPI Flash Module, BH1750 Light Intensity Sensor Module, Stepper Motor, WQ25 Memory Device, Multiple Sensors (e.g., Temperature, Proximity).

Development Platform: Raspberry Pi OS, Yocto Project.

Description: Integrated various sensors, W25Q64 SPI Flash Module, BH1750 Light Intensity Sensor Module, stepper motor, and WQ25 memory device with Raspberry Pi 5 to collect and process data in real-time. Developed a custom OS using Yocto Project (Kirkstone branch) to meet specific GUI and functional requirements. Also implemented USB SSD booting for enhanced system performance and reliability. Enabled display sleep and wake-up functionality within the Yocto environment for power efficiency.

Declaration

I hereby declare that all the above-mentioned details are true to the best of my knowledge and belief.

JAMMULA MURALI KRISHNA