

Meghana Redapanga

Senior Embedded Engineer – Experience 4+ years

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📍 Hyderabad

Pro-active and highly motivated Senior Embedded Engineer with experience in all aspects of the software development life cycle, including Requirements analysis, Design, Configuration, Implementation, Testing and validation support.

Technical Knowledge:

- Expert in Embedded C code Development.
- Experience in Design and Development Activities of multiple projects.
- Proficient in Requirement engineering.
- Familiar with protocols UART, I2C, SPI, Ethernet and CAN.
- Experience in Defect analysis and Defect fixing.
- Systematic debugging skills (understanding problem behavior, re-creation, observation, tracing & solving) using logic analyzer, scope, peripheral simulator, terminal, sniffers, debugger & debugging techniques as per problems/issues.

Tools & Technologies:

Programming Languages:

C Programming, Embedded C.

Development Tools:

STM32 Cube IDE, Visual Studio code, Arduino IDE, Keil IDE.

Debugging Tools:

Debuggers, Logic Analyzers, Oscilloscopes, Terminals, Packet Sniffers (like Wireshark), ...etc.

Micro Controllers:

STM32F446RE, STM32F401CCU6, STM32F104C, STM32H735VGH6, Arduino Uno/Mega/Due.

Peripherals:

GPIO, PWM, Timers, Counters, Interrupts, ADC, DAC,...etc.

Protocols:

UART, SPI, I2C, Ethernet, CAN.

Experience:

Senior Embedded Engineer

AVANTAL Ltd, Hyderabad

Aug 2024 – Till now.

- Hands on Experience with STM32xx Microcontrollers.
- Responsible for Design and Development of the Software.
- Reviews handling for Implementation, technical design and documentation.
- Managing and leading the team, providing technical guidance, mentorship, and professional development support, planning, designing.
- Work Breakdown and Task Estimations.
- Worked in Satellite Communications Project to Implemented the SPI based Display code.
- Ethernet code development to control and monitor the Software Defined Radio.

Senior Software Engineer

VECTOR Technics Pvt Ltd, Hyderabad

June 2022 – Aug 2024.

- Hands on Experience with ARM Microcontrollers STM32F446RE, STM32F401CCU6, STM32F104C.
- Worked on BLDC Motor Controllers
- Implemented the code for the Data Acquisition System Project
- PWM Generated for One Shot, D-Shot.
- Handled Coding, Unit Testing with **VectorCAST** and Functional Testing of the implemented feature.
- Analyzed the Defects and Identified the Root causes.
- Worked with Different Temperature and Pressure Sensors-**BMP280**, **MAX6675** also Thrust and Torque Sensor **HX711**.

Embedded Firmware Engineer

Nordicsai India Pvt Ltd, Hyderabad

July 2020 – May 2022

- Smartwatch Development using **STM32** Microcontroller.
- Integrated BioHub Sensors using SPI and I2C Protocols.
- Integrated Accelerometer Sensors using I2C Protocol.
- Handled Requirement Analysis, Design, and Implementation.
- Code Implemented and API's Developed for Different BLDC Motors.
- Microcontroller Programming and R&D Works with Different Motors and Embedded Devices.

Trainings:

- ISM University
Embedded Systems (6 Months Training)
- Research Center Imarat (RCI)
Security Systems and Communications (1 Month Training)

Education:

- **B.Tech., Electrical & Electronics Engineering with 72.44%**
Mahatma Gandhi University, 2017
- **Higher Secondary Examinations, MPC with 93.00%**
Andhra Pradesh State Board, 2013
- **Secondary Examinations, 88.00%**
Andhra Pradesh State Board, 2011

Achievements:

Awarded 2nd Prize in Essay Writing Conducted by “**The Institution of Engineers (India), NALGONDA**”.