Contact

www.linkedin.com/in/shubhamembedded (LinkedIn)

Top Skills

Software Development
Linux
Debugging

Certifications

MATLAB Onramp
Scrum Fundamentals Certified (SFC)
Introduction to AWS IoT

Shubham Gupta

Embedded Software Developer at Qualcomm | Ex - GE | C | DS | C++ | ARM Architecture | Embedded System | Linux Kernel
Hyderabad

Summary

I have a knack for solving programming problems and derive pleasure from designing optimized algorithms. I intend to solve real-world problems by designing efficient algorithms throughout my career. I want to build robust and scalable software products with the help of technical and algorithmic skill I acquired through my education in Embedded systems in my professional life.

2.4+ year of experience as Embedded software Developer with a demonstrated history of working in the Renewable energy industry.

Skilled in Automation, Embedded C, Data Structures, Algorithm, ARM Architecture, Operating System, RTOS, C++, Python, Embedded Linux, Atmel AVR, IEC 61850 Standard, DNP, Modbus, Linux kernel programming, Debugging, CAN Bus, I2C, SPI, BLE, ESP32, Software Development, Agile Methodology.

Strong engineering professional with a PG-Diploma in Embedded System and Design focused in Embedded Systems from CDAC ACTS PUNE (HQ).

Experience

Qualcomm
Embedded Software Developer
June 2021 - Present (1 month)
Hyderabad, Telangana, India

Working on:
- Hypervisor & TrustZone security architecture (on ARM)
- System Memory Management Unit (SMMU)
- RTOSs (Qualcomm propitiatory) - ARM, RISC-V, Hexagon DSP
- Access control & security architecture using ARM IPs

GE

Embedded Software Development Engineer

March 2019 - June 2021 (2 years 4 months)

Hyderabad Area, India

Key Roles:

1. 2+ year of experience as Embedded Software Developer in Substation Automation - Projects & Application Design.

2. Firmware Design & Development for IEC61850 Ed2 & IEC61850 Ed2.1 server and Digital substation solution in GE substation gateways.

3. Firmware Design & Development for communication features of Substation Gateways with the IED(Intelligent Electronic Devices), that are used in Automation Control, Smart Grid and communication products in Power generation, transmission and Distribution Utilities.

4. Proven Experience in Embedded Software Development, Automation Application development and involved in complete validation cycle. Preparing high level test plan, test reports & traceability matrices.

5. Designed & Developed Automation tools for IEC61850 Server and SCL files Validation.

6. Experience in gathering and analyzing customer requirements. Developing specification documents and delivering integrated solutions for customer in Substation Automation domain.

*Scrum Fundamental Certified
*Worked on Industrial Communication protocols - IEC61850 Ed2 & Ed2.1, DNP3, IEC60870-5-104, Modbus, TCP/IP, UDP.
*Programming skills- C,C++,Python, java script, shell script
*Tools - TMW Test Harness, Kema 61850 Client, Omicron IEDScout, TMW Distributed Test Manager(DTM), Wireshark, GDB.

Centre for Development of Advanced Computing

Academic Project

November 2018 - January 2019 (3 months)

Pune, Maharashtra

Title:- VEHICLE PROTECTION MANAGEMENT USING CAN & IOT

The Project is based on CAN bus. It is implemented using micro-controller boards and CAN transceiver. The boards used are Beaglebone Black and STM32F4 discovery. This application will be effective for automation in cars. It will help to detect obstacles and avoid accidents by sensing the environment. These different specification's will be communicated and displayed to a Remote location using IoT Protocols.

Education

Centre for Development of Advanced Computing (C-DAC)

PG-DESD, Embedded Systems · (2018 - 2019)

Dr. A.P.J. Abdul Kalam Technical University

Bachelor of Technology, Electronics and Communications Engineering · (2013 - 2017)