ESWAR Sai T

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ABOUT ME

- With 5.6+ years of Experience in Development of Embedded projects, I am a Curious Embedded **Software Engineer** with can-do attitude, strong foundation in cross platform coding to meet specific user requirements.
- Currently Working with Capgemini Technology Services Pvt.LTD, as Senior Software Engineer from Jan-2022 to till date at client location **Western Digital R&D**, Bangalore.
- Has good understanding of SanDisk NAND Memory firmware technology.
- BSP software development and board bring-up experience and software full life cycle development experience either independently or on a team development activity on embedded C and assembly language.
- Excellent experience in reviewing requirements and actively involved in design phase and developing of various advanced features in NAND memory firmware.
- Basic understanding on NVME
- Safety critical real-time embedded software development/verification skills through 3.2 Years' experience in defense industry and 2.3 Years' experience in Storage Industry.
- Familiar with Product Development Cycle, Agile and Waterfall methodologies.
- Passionate to learn new technologies and willing to take risks to try new things.
- Ability to work with rigorous Development timelines, deliverables and to see any assignment meeting the quality standards within the established schedule
- Experience with phases of software life cycle such as requirements gathering, software design & modelling and coding.

PROFESSIONAL EXPERIENCE

Senior Software Engineer

Capgemini, Bangalore ***Jan 2022 – Present***

- Actively Contributed to work on Rom Tape Out Activity.
- Good Understanding of total Physical Storage Modules. Interaction to Lower layer Hardware IP's.
- Took ownership of IFT, Relocation, Data Retention from requirement gathering and reviews, discussions, design document.
- Good knowledge of Wear Levelling and Garbage collection, Bad Block Management Modules.
- Took ownership of implementing 256GB, 512GB, Half Die Capacity configuration sets.
- Providing the change requirements for the modules owned.
- Became end to end point of contact of few features in Physical Storage such as Read Scrub, CVD, IFT , PSUT, RFM, THM modules.
- Become POC for Build tool from firmware team.
- Migrated Python 2.7 Build Scripts to Python 3.8 Build Scripts. With Security Key Encryption.

Embedded Software Engineer

JK DELOPT, Bangalore ***Sept 2018 – Jan 2022***

- Designed, developed Algorithm and Application.
- Designed, developed and verified BSP for Serial port, SPI flash& SPORT for Analog Device.
- Participated in Custom Hardware Design activity and Responsible for board bring up Activity.
- Debugging of existing products to enhance product life.
- Responsible for Customer communication for support integration.
- Contributed to System architecture Design and Development.
- Developed design documentation and supported code reviews and design reviews.
- Software requirements analysis, software design development verification, code review and mentoring on embedded software team for commercial/defense avionics.

SKILLS

- Languages
  - ✓ Proficient : C/C++[basics], Embedded C
- Operating Systems
  - ✓ Linux (Ubuntu), Windows
- Software Technologies
  - ✓ Source Insight, Wing IDE, KEIL uVision3 Compiler, VIM Editor.
  - ✓ Application Development, IPC, Multithreading, Socket programming
  - ✓ Visual Studio 2013 Professional, C /C++ Eclipse, MPLAB X ,MPLAB IDE , ATMEL 7, MATLAB.
  - ✓ GIT,JIRA. JTAG, SanDisk Viewer, SanDisk Dump analyzer
- Communication Interfaces
  - ✓ UART, SPI, I2C,CAN,Memory interfaces.
- Hardware
  - ✓ Analog Devices : BF609,with Custom Design HW
  - ✓ Debugger : ICE 1000 JTAG Emulator with Analog Device Processors, MQX Meta ware debugger, JTAG, Visual Studio, GDB
- Processors& MCU's
  - ✓ PolarisLiteMP16 [SanDisk Specific]
  - ✓ Atmel : AT mega 2560, BF609, ADSP21369 (DSP).Microchip : PIC24FJ128GA606.

PROJECTS

❖ **SD Express card (R&D)**

Summary : Aim of this project is to develop SD express NAND storage card firmware with multiple Physical Interfaces like SD, NVME.

Role : Good Understanding of total Physical Storage Modules. Interaction to Lower layer Hardware IP's. Become POC for Build tool from firmware team.

❖ **Integrated Optics Module**

Summary : Integrated Optics Module is interfaced with three optics for visualizing the enemies' and will be controlled by RCWS the inputs are given throughs RCWS.

Role : Requirement Analysis. Development of various Algorithms related to Control the Optics Tracking the laser spot. and developed customer requirements and Testing on PC environment. Porting and Optimization of Algorithm on Embedded Platform.

❖ **Stabilized Head Assembly**

Summary : This project is used for controlling the Naval submarine applications.

Role : Firmware Driver development, temperature sensor and Development of Algorithms related to firmware board.

❖ **Muzzle Velocity**

Summary : It is designed for capturing sensor data and flush to Nand flash.

Role : Firmware Driver development, Vector - NAV sensor and Development of Algorithms related to firmware board.

HIGHEST ACADEMIC EDUCATION

Bachelour of Science in Electronics **CGPA – 7.8**
Acharya Nagarjuna University **2022**
Guntur , Andhra Pradesh

Diploma in Electronics & Communications **CGPA – 9.18**
Nettur Technical Training Foundation **2018**
Electronic City , Bangalore - 560100

LANGUAGES

- English, Hindi, Telugu , Kannad

DECLARATION

I hereby declare that the information given here is correct to the best of my knowledge and abilities.

Eswar Sai T