SINDHUJA RAVI

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EDUCATION

MS, Computer Engineering, *San Jose State University (SJSU), California* August 2022 - Present

Relevant Coursework: C++, Data Structures and Algorithms, Computer Architecture, Operating Systems, System Software, Advanced Computer Design, Embedded Software, High speed digital system design, Embedded Hardware design.

B.E, Electronics and Communication Engineering, *Sona College of Technology, India* July 2013 - May 2017

Relevant Coursework: Computer Hardware and interfacing, Embedded and Real time system, Micro controller and RISC Architecture, Control system, Digital electronics.

WORK EXPERIENCE

Green Cubes Technology (Bengaluru,India) July 2021 - July 2022

Senior Software Engineer

- Developed algorithms for Battery Management Systems with Model Based Design for Lithium ion batteries.
- Designed, coded, tested and installed software solutions in Battery Management Systems for development of SOC/SOH, Charge control, Discharge control modules.
- Formulated a process flow for MBSE using MATLAB RTW E-coder and tracked quality assurance measures with IQMS- ISO 9001:2015 and followed agile development process.
- Generated auto-code via MATLAB and tested on real time battery packs with SCM controllers.

Renault Nissan Mitsubishi Alliance (Chennai,India) July 2017 - April 2021

Model Based Design Engineer, Embedded Software, Powertrain

- Designed and customised standardised library blocks for conception with MBDR Compliance using standards like MAAB, MISRA and MXAM.
- Developed software automation tools using MATLAB scripting and Python.
- Validated models and specifications with MIL/SIL testing and unit testing.
- Created requirements and tests for the functions and associated them in SILK Central tool with Python scripting and SQL query to extract data from SILK database.
- Worked on Renault and Nissan Engine Management System and formulated Alliance Engine Management System on MBD Tool development and on ADAS Libraries.

TECHNICAL SKILLS

- **Languages**: C/C++, Python, MATLAB scripting, Embedded C
- **Other skills**: MATLAB Modelling (Simulink Stateflow), MXAM, Verification and Validation (MIL-SIL), ISO 26262, Software Automation, Battery Management systems, Engine Management Systems.
- **Project Management**: Atlassian JIRA, GIT, Plastic SCM, Tortoise SVN.
- **Databases**: Silk Central, Oracle SQL

CERTIFICATIONS

- Programming in JAVA | Oracle and NIIT 2016
- LabVIEW for Machine Learning of Images | IETE 2016
- Program on Intelligent systems | INTEL corporation. 2015

PROJECTS

Automation for Blood vessel segmentation in digital images October 2016 - March 2017

- Developed automation script that does feature extraction from the retinal vessels and operation to enhance the digital images using MATLAB scripting, helping ophthalmologists in saving the vision of many.

Automation of Toll booth system February 2015 - October 2015

- Created prototype for automation of toll booth systems using RFID Technology.
- Contributed towards Raspberry pi programming for RFID reader using Python and Embedded C.

ACHIEVEMENTS AND EXTRA-CURRICULAR ACTIVITIES

- ***Employee of the month*** at Renault Nissan Mitsubishi for independent handling of all MBD-Library activities and being an active member of GES-CFT team. 2021
- ***Best Outgoing Student*** at Sona College of Technology. Received this award for my achievements in co-curricular, extracurricular activities throughout my undergrad along with good academic excellence. 2017
- ***Anna University Chess Tournament*** Bagged the champion title in the Anna University Zone VIII Chess tournament . 2016