

EMPLOYMENT

Software Engineer

(Individual Contributor)

Cisco Systems, Inc

March 2021 - Present

Data Center & Cloud: Nexus Switches (N9K)

- Implemented the feature 'binary logging' to increase the density of logs to be stored in the buffer. Refactored SDKs to utilize this feature. Achieved 150% improvement of more logs saved in the same amount of memory.
- Implemented the feature Proactive Consistency Checker to identify the inconsistent routes and adjacencies and re-establish them. Thus reduced a significant number of issues with respect to packet drops.
- Fixed customer reported bugs and internal findings independently.
- Development of L3 NetStack(Cisco NX-OS) and User Space Drivers(USD) for Broadcom and Cisco ASICs, i.e., Ethernet Switches.

Software Engineer

(Individual Contributor)

NXP Semiconductors

Apr 2019 - Dec 2020

Embedded UICC (System On Chip - eSIM)

- Go to person for eUICC system specific compliance issues.
- Mentored new hires in the team.
- Developed Smart Card/eUICC Communication Protocol Stack i.e., ISO7816 T=0 & T=1 protocols.
- Developed eUICC features on ARM Cortex Mx MCUs (JCOP OS) in compliance with GSMA, SIMAlliance, GP, 3GPP, ETSI standards. Exposed APIs for applications to make use of these features.
- Analysis, reproduction, and resolution of issues reported by customers, Mobile Network Operators and Standard bodies.
- Pre-Silicon(SoC) verification using FPGA emulators before tape out.
- H/W setup and troubleshooting with logical analyzers, oscilloscopes, and various other post silicon validation tools from third party vendors such as Comprion, Galitt, FIME, UL.
- Performed validation of eSIM software (RTOS) deployments into the remote mobile equipment.
- Responsible for Golden Sample Preparation for customer delivery and product certification from standard bodies i.e., board bring-up.

EDUCATION

Chennai, TN

Anna University

Jun 2014 – May 2018

- Bachelors in Electronics and Communication Engineering, May 2018. GPA: 3.3/4.0
- Undergraduate Coursework: Digital Electronics, Computer Architecture, Microprocessors, Microcontrollers, Embedded and Real Time Systems, Computer Programming, Engineering Entrepreneurship.

TECHNICAL EXPERIENCE

Projects

- [Memory Leak Detector](#)
- [Wish\(Unix Shell\)](#)
- [Smart Spectacle](#)
- MP3 Tag Reader/Editor
- [Text Indexer](#)
- [Autonomous Surveillance Robot](#)
- [Image Steganography](#)
- [Lexical Analyzer](#)
- [CPU Spy](#)
- [Arbitrary Precision Calculator](#)
- [Expression Converter](#)
- [Network Packet Sniffer](#)

ADDITIONAL EXPERIENCE AND AWARDS

- **2nd Prize, Skill Summit:** Awarded for Autonomous Surveillance Robot, out of 40+ projects from all over TN.
- **Funds:** Received for Smart Spectacle from Dept. of Science and Technology.

Languages, Tools and Technologies

- C; Java; Python; Scripting; Data Structures; Algorithms; Object Oriented Programming; GCC; GDB; Linux;
- CPU Virtualization and Scheduling; IPC mechanisms; Multithreading; Git; Tortoise SVN; ACME ClearCase; Agile;
- eUICC File System, Low level programming, hardware debugging, Trace analyzer tools, Eclipse IDE, Vim;