

# Sameer Jawale

**Software Engineer - PolySat, Cal Poly San Luis Obispo**

Martinez, CA - Email me on Indeed: [indeed.com/r/Sameer-Jawale/43a5445007a6ae41](https://indeed.com/r/Sameer-Jawale/43a5445007a6ae41)

Seeking a full-time position to expand my understanding on firmware design and computer networking

## WORK EXPERIENCE

### Software Engineer

PolySat, Cal Poly San Luis Obispo - San Luis Obispo, CA -

February 2016 to Present

Developed and Tested firmware for analog to digital converters, multifunction devices, and solar angle sensors

- > Researched documentation on various electrical components and implemented compatible drivers
- > Established tutorials and beginner projects on Flight Software build, Processing, Driver Development, and general C and

Linux use for incoming software recruits

- > Collaborated closely with other team members and engineers in a multidisciplinary environment

### Software Engineer Intern

Cisco Networks - San Jose, CA -

June 2017 to September 2017

Developed software for the design and development of VxLAN technology on Cisco's Nexus 9000 (NXOS) product line

- > Implemented script-based Consistency Checkers to verify the software and hardware programming of L3 EVPN routes, VxLAN VLANs, and NVE peers to improve debuggability for network engineers.

- > Applied a Memory Allocation Wrapper to several libraries to visualize and track memory leakage and corruption in real-time

- > Coordinated with a talented group of engineers to determine software requirements for upcoming software releases

## EDUCATION

### B.S. in Computer Engineering

California Polytechnic State University

June 2018

## SKILLS

ANALOG (1 year), FIRMWARE (1 year), LINUX (1 year), ALGORITHM (Less than 1 year), C++ (Less than 1 year)

## ADDITIONAL INFORMATION

### SKILLS

- Proficient in: C & Python, Familiar with: Java & C++
- Experience with VxLAN, Ethernet VPNs (EVPN), L2 Switching/Forwarding, L3 Multicast/Unicast, VLANs
- Embedded systems experience (firmware development)
- Unix/Linux Environment and Systems Programming experience
- Knowledge of Computer Networks, Operating Systems, Computer Architecture, and Algorithms
- Analog and Digital circuit design/analysis knowledge (DipTrace and LTSpice)
- VHDL experience/FPGA experience

### PROJECTS

Remote File Transfer, Introduction to Computer Networks May 2017

Implemented a File Copy system between servers and clients over UDP

- Designed a strict packet-flow diagram using Go-Back-N, a sliding window flow control algorithm
- Utilized flags to indicate whether packet-loss has occurred and resends the last N packets based on the Selective Reject
- Incorporated multithreading to serve multiple clients simultaneously
- Learned the importance of abstraction, modularity, and design with large projects

TinyFS, Introduction to Operation Systems March 2017

Designed a single directory (Tiny) File System with Disk Emulator

- Built an emulator that performed block operations (read, write, open, close) on the disk (regular UNIX file)
- Implemented the TinyFS Interface to create the file system, mount files onto the directory, and provide basic file operations
- Incorporated additional functionality to change file permissions, read/writes bytes in disk, and display timestamp information