# PARMVIR SINGH

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## OBJECTIVE:

Actively seeking an internship/job in the areas of Hardware, Firmware, or Software Engineering.

## EDUCATION:

**Bachelor of Science, Computer Engineering** — ***Graduated:*** May 2020

California State University, Sacramento, CA

***GPA:*** 3.5

## WORK EXPERIENCE:

***Embedded Systems Engineer*** — ***NetworkSound*** — ***August 2020 - Present***

- Assisted in designing and implementing software of embedded systems for the professional and the consumer audio market.
- Developing a web-based application for audio products for user-friendly operations.
- Software experience in C/C++ on Linux, Python, html, CSS, and embedded systems.
- Knowledge in handling application development life.

***Prime Now Associate*** — ***Amazon*** — ***December 2017 – February 2020***

- Worked in a super-fast paced environment to meet daily goals.
- Provided services efficiently with high level of accuracy and problem solved minor technical difficulties.

## SKILLS-LANGUAGES, TOOLS, PLATFORMS:

C/C++, Verilog, Python, JavaScript, Java, VHDL, Github, x86 Assembly, ARM Assembly, HTML/CSS, MYSQL, Arduino IDE, Multisim, OrCAD PSpice, Cadence Virtuoso, DOS, Windows (XP, Vista, 8.1, 10), MS-DOS, UNIX, Linux (Ubuntu, Debian), VMWare, Punjabi, Hindi

## RELATED PROJECTS:

**Senior Design Project**

- *Semi-Autonomous Hydroponic Greenhouse:* Currently involved in designing and building a Semi-Autonomous Hydroponic Greenhouse with 4 other team members. The team consists of 1 Electrical Engineer (EE) and 4 Computer Engineering (CpE) students. Directly assisting with designing the Control System for all sensors and implementing the desired measurables in code for these sensors.

**Java/C Projects**

- *Multi-threading:* Experimenting with the performance impact of multithreading using real time measurements using the POSIX thread library on a UNIX system. I oversaw writing a program that sorts an array of random integers first sequentially and then using multi-threading.
- *User-level Threading:* Implementing context switching using *sisetjmp* and *silongjmp.* Also, implementing two preemptive scheduling algorithms: Round-robin and Lottery scheduling and designing data structures for thread entities.

**HTML/CSS Project**

- *My Portfolio*: Built a portfolio website for myself using HTML and CSS. I built it using Brackets text editor and published it on Github pages. The portfolio is responsive on all browsers and devices.

**Computer Hardware Designs**

- *PCI Bus Arbiter:* In Verilog, designed and simulated a PCI Bus Arbiter that performed bus arbitration among multiple master devices on a PCI Bus. The bus arbiter utilized the Round-Robin Priority Scheme to designate the PCI Bus to the appropriate master device.

## AWARDS/CLUBS:

Deans Honor List — ***Spring 2017 – Spring 2019***

***MEP,*** *Member* — ***Fall 2017 – Spring 2020***

**SWE,** *Member* — ***Fall 2017 – Spring 2020***

**SSA,** *President/Member* — ***Fall 2017 – Spring 2020***