## ANMOLDEEP SINGH SANDHU

Ph: +1(916) 562 6301 Email: <u>anmolsandhu316@gmail.com</u>

## **EDUCATION**

California, CA California State University, Sacramento

Fall 2017 - Fall 2019

• MS in Computer science - 3.27

**Coursework** - GPU programming, Advanced Operating System, Computer Architecture, Algo design and analysis, Database System Design.

Punjab, india Punjab technical university

Fall 2012 - Fall 2016

• Bachelor in computer science - 3.2

# **INDUSTRY EXPERIENCE**

**Software Engineer Intern** 

**HPE Aruba Networks(Roseville, CA)** 

May 2019 - Present

- Worked on Data center switches QOS scheduling team.
- Designed automated tests for Data center network switches using IXIA.
- QOS and LAG network feature performance and signal coverage testing.
- Testing Aruba WIFI Access-point for TCP throughput, WIFI density and battery drainage.
- Developed feature to monitor memory stats for packet buffers (ingress egress VOQ's).
- Developed Python scripts for traffic generation and feature testing using scapy.
- Improved old tests run time upto 50% by removing redundancy.

## **Engineer Intern**

Xenonstack (Chandigarh, india)

**Spring 2016-Fall 2016** 

- Changed Nltk framework to handle large files in memory.
- Classification of documents using Machine learning algorithms.
- Handling bottleneck modules in C/C++.

#### **PROJECTS**

• Insurance fraud detection (python)

Detecting and flagging potential fraud by **modelling data in a graph**. Using depth first search and flagging the nodes under certain conditions.

• Linux system call through drive module (C)

Replace the **system call table** with our own function pointer that logs the user id of all user when opening a file.

• Linux driver for keyboard reading through Interrupts.(C)

A character device which logs all keys pressed into a proc file. **Workqueues** were used To defer the work into Bottom half minimizing work done in interrupt service routine.

• A linux task manager with network and process log options( python )

A python based gui and linux task manager to view cpu performance and various other performance metrics. Logging stats using shared memory.

• 2D image blurring using cuda GPU (C++)

Using parallel computation of pixels to blur image using adjacent pixels average values and shared memory of cuda.

**Programming languages** - C, Python, C++ , x86 assembly basics, GPU CUDA programming. **Technologies** - Linux, Computer Networking, SQLite.