# **Dennis Gill**

#### EDUCATION

# University of California, Davis

B.S. Computer Science and Engineering, B.S. Political Science Expected Graduation: June 2019

# PROGRAMMING PROJECTS

# Projects:

- Coded fully-functional B-tree insertions and deletions
- Wrote Dijkstra's algorithm to find the shortest paths between a series of cities
- Wrote an efficient airplane boarding program to minimize boarding time using stacks and queues
- Wrote Huffman encoding each of the characters in the file using binary heap and B-Trees
- Translated numerous small projects from C code to Assembly language

# **Personal Projects:**

- Developed iOS Application which organizes student classes returns projected course grades/required score to achieve desired grade.
- Wrote CPU cache simulator to minimize the time as well as the number of reads/writes to/from simulated RAM caused by cache misses

# RELEVANT COURSEWORK

Data Structures Computer Architecture Databases
Object Oriented Programming Machine Language Advanced Calculus

#### **SKILLS**

Technical: C, C++, Java, Python, Rust, Swift, Prolog, Assembly language for x86, SQL, VMware, MS Office, Windows Server, HTML, CSS, MATLAB

Languages: Fluent in English, Hindi, Punjabi, Urdu and Mandarin

### **EXPERIENCE**

#### Computer Networks Technician, UC Davis Bookstore

August 2017 - Present

- Manage and maintain department networks/servers
- Install and maintain computer operating systems hardware and software packages
- Manage campus DHCP and DNS servers
- Ensure campus networks are configured for optimal security

# Aggie Host Security Supervisor, UC Davis Police Department, Davis, CA

January 2014 - August 2017

- Evaluate risk probability for campus special events and mobilize appropriate assets
- Provide support for department CAD/GIS Mapping systems
- Manage and maintain ride hailing application via pushing software patches
- UC Davis Police Department liaison to ASUCD and Unitrans

# Aggie Host Security Officer, UC Davis Police Department, Davis, CA

November 2013 - January 2014

- Enhance campus diplomacy by providing vehicular transports for students and dignitaries
- Minimize risk through access control countermeasures; drew up exit strategies for venues
- Manage large crowds of 100 plus people and to execute stringent inspection protocol

# Student Computer Technician, Moreau Catholic High School, Hayward, CA

February 2011 - June 2013

• Service malfunctioning computer machines; replace hardware components and configure OS