

EDUCATION

University of Southern California, Los Angeles, CA

Bachelor of Science, Computer Science

Cumulative GPA: **3.98/4.00**

May 2017

Dean's Scholarship – Awarded with Full USC Tuition & Housing (60K/Year)

Research Funding – Awarded by University of Washington to improve the BGP network

Masters in CS – Accepted to accelerated 1-Year Masters Program based on GPA - Class of 2018

TECHNICAL SKILLS

Programming Languages & Software:

Proficient: C++ **Familiar:** Python, Bash, Git, Nagios, Quagga

USC Certification Classes:

Ethical Hacking, Mobile App Development

WORK EXPERIENCE

Research Internship – Software Engineering (USC/University of Washington)

Summer 2015

BGP Network

- Created system to monitor BGP connections & BGP Autonomous Systems through Nagios, Quagga, SNMP
- Configured BGP Muxes to run developed monitoring bash scripts, and announcement experiments on BGP
- Manually compiled Nagios and Quagga to customize installation for peering test bed

Improving Email Reliability & Performance

- Developed automated system to analyze every email sent through USC email servers to determine cause of delays
- Program measured delay by individual intermediate servers that an email travels through prior to final destination
- Program produces analysis report & CDF graph based on seconds elapsed due to downtime by intermediate servers

Undergraduate TA – Data Structures C++ Course (*Volunteer*)

Summer 2015

- Held exam review sessions, office hours, assisted students with labs, projects, and creating data structures ground-up
- Collaborated in a team environment with TA's to assist a class of 30 students

Police Cadet – *Lead Command Cadet*

January 2013 – August 2014

Santa Monica College Police Department

- Operated equipped Police Vehicles and tactical gear; conducted hundreds of background searches & fingerprinting
- Trained 8 new-hires; entrusted with acclimating new Police Cadets with training, policies, standards, and ethics
- Created and maintained record database of thousands of citations and violations – RIMS database

PROJECTS

Ship Together

- Developed iPhone App prototype interface in which users join a collective Amazon shopping cart
- Each user in the collective cart contributes towards the \$35 minimum for free shipping

Online Retail System

- Created different products and users using inheritance and polymorphism
- Developed a Splay Tree to provide fast search functionality of products
- Implemented Dijkstra's Algorithm to find similarities between users to offer product suggestions
- Implemented a Hashing algorithm to encrypt and store hashed passwords
- Implemented GUI using Qt in C++

Image Processing

- Overlay green screen image on any background; through each RGB pixel layer v
- Program adaptable to any color 'green screen' background, with any added tints/shades/imperfections

Audio Processing

- Automatically download user selected files from internet database
- Detected operating system, executed system commands to manipulate audio files to user specifications

Leadership: Co-Founder of a Petition to bring Men's Soccer to USC – over 1,000 signatures (Supported by Annenberg)

USC Clubs: ACM, IEEE, Brazilian Jiu Jitsu, Street Dance Society

Hobbies: Traveling in search of incredible surf, snorkeling, rock climbing, and acroyoga