

EDUCATION**University of Southern California**, Los Angeles, CA**May 2017**

Bachelor of Science, Computer Science

Cumulative GPA: **3.98** (100+ Units)**Dean's Scholarship** – Awarded with Full USC Tuition (50K+/Year)**Research Funding** – Awarded by University of Washington to improve the BGP network**Masters in CS** – Accepted to accelerated 1-Year Masters Program at USC for Computer Science – Class of 2018**TECHNICAL SKILLS****Programming Languages & Software:****Proficient:** C++**Working Knowledge:** Python, Bash, Git**USC Certification Classes:**

Ethical Hacking, Mobile App Development

WORK EXPERIENCE**Undergraduate TA – Data Structures C++ Course (USC)****Summer 2015**

- *Topics Covered* – Red Black Trees, Hash Tables, Sorts, Searches, Traversals, Inheritance, Polymorphism, Stacks, Queues, Operator Overloading, QT, Iterators, Linked Lists, Memory Allocation, Run Time Analysis
- Held office hours for assisting students with labs, projects, and creating all mentioned data structures ground-up

Research Internship (USC/University of Washington)**Summer 2015**Improving Email Reliability & Performance

- Created an automated pipeline for all USC emails to be analyzed
- Developed a program to detect delay by intermediate servers, and automated analysis report for emails

BGP Network

- Created system to monitor upstream BGP connections, and maintained BGP Autonomous Systems
- Configured BGP muxes: Ping Checks, SSH connections, machine health, system loads, confirming system users

Police Cadet – *Second in Lead Command***January 2013 – August 2014****Santa Monica College Police Department**

- Operated equipped Police Vehicles and Police Tactical Gear; conducted 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 citations and violations

PROJECTS**Ship Together**

- Developed iPhone App prototype 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 using inheritance and polymorphism
- Developed a Splay Tree to provide fast search functionality of products
- Developed Red Black tree to be used as a map, and implemented in-order traversal iterator
- 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
- 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

RECENT ACTIVITIES**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