

EDUCATION

- **University of California, Los Angeles** Los Angeles, CA
Bachelor of Science, Computer Science; GPA: 3.84/4.00 Sep. 2014 – Dec. 2018
 - **Coursework Includes:** Algorithms & Complexity Theory, Software Engineering, Computer Networks, Databases, Artificial Intelligence, Bayesian Networks (graduate-level), Programming Languages, Software Construction Lab, Operating Systems.
 - Member, Upsilon Pi Epsilon CS Honor Society.

WORK EXPERIENCE

- **Facebook (Upcoming)** Seattle, WA
Software Engineering Intern Jun. 2018 – Sep. 2018
- **Tyvak NanoSatellite Systems** Irvine, CA
Software Engineering Intern Jun. 2017 – Sep. 2017
 - Developed features for ground control software, including front-end and back-end web systems and MacOS applications, to improve user experience and prevent operator error.
 - Implemented account-based authorization in a Node.js-based web application to control access to satellite telemetry and commands.
 - Helped build a data access layer in C++ to improve database query performance, and built a proxy in C++ and JavaScript to incorporate it into a Node.js server.
- **Dovel & Luner, LLP.** Santa Monica, CA
Legal Intern Jun. 2014 – Sep. 2014
 - Analyzed patents, identified potentially infringing products, and communicated my findings to the firm's new matters department to assist them with case selection.

RESEARCH EXPERIENCE

- **UCLA Automated Reasoning Group** Los Angeles, CA
Undergraduate Member Jan. 2018 – Present
 - Conducted novel research on applications of Bayesian Networks and PSDDs to traffic route prediction.
 - Designed algorithms and created implementations in Python and C++ to study properties of hierarchical route distributions.

ENGINEERING PROJECTS

- **Artificial Intelligence**
Implemented optimized versions of informed and uninformed search algorithms in Common Lisp.
Modified a TensorFlow image classification program to improve accuracy.
- **Operating Systems Principles**
Used C to write system-level programs for Linux.
Solved problems related to I/O, file system design, and synchronization of multithreaded programs.
Wrote a driver for an embedded IOT device in C.
- **Computer Networks**
Created a TCP-based file transfer application and implemented TCP on top of UDP using C++.
Collaborated on design and implementation of router firmware to route IPV4 packets, including implementations of ARP for IP address resolution and ICMP for control message handling.

TECHNICAL SKILLS

- **Languages:** Proficient in C, C++, and JavaScript. Experience with Python, Objective-C, BASH and Lisp.
- **Web Frameworks:** Experience building web client applications using Node.js, Express, MySQL, Passport, D3.js, Bootstrap, and Socket.io.
- **Agile Development:** Experience with architecting and building software solutions using agile development principles.