

Ryan Ku

software engineer

Contact

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<https://github.com/ryanku98> 🐙
<https://ryanku98.github.io/about> 🌐

Education

Santa Clara University
M.S. Software Engineering
September 2019 – June 2020
GPA: 3.96/4.0
Credits: 16/46

Santa Clara University
B.S. Computer Engineering
Mathematics Minor
September 2016 – June 2020
Major GPA: 3.8/4.0
Cum. GPA: 3.6/4.0

Skills

Programming Languages

JavaScript • PHP • HTML • CSS •
SQL • Python • C++ • C • Java •
Ruby

Libraries and Frameworks

Backbone • Flask • Ruby on Rails

Tools and Operating Systems

Git • SVN • Windows OS • Linux
(Ubuntu/CentOS) • Mac OSX

Experience

Software Engineer Jul. 2020 – present San Diego, CA

Art of Problem Solving – STEM-focused education

- ❖ Developed the new AoPS Contest Platform
 - Built extensible problem types from scratch to accommodate a variety of contest types and UX features
 - Built participant portals and registration infrastructure
 - Allowed hundreds of thousands of students to continue participating in math competitions online during COVID19

Software Associate Intern Jun. 2019 – Aug. 2019 Washington, DC

Anzu Partners – investment firm managing ~\$400M of capital

- ❖ Helped develop a Flask application to interface with proprietary NIR spectrometer and map data
- ❖ Participated in diligence efforts on various software startups

Network Engineer Intern Jun. 2018 – Aug. 2018 Santa Clara, CA

Hillstone Networks – enterprise network security

- ❖ Researched propagation, infiltration, and detection-prevention techniques of prominent cryptocurrency-related malware
- ❖ Investigated process initiations/terminations, registry privilege changes, service ports, and more used by numerous malware to apply to current and future products for advanced detection

Coursework

Theory of Algorithms
Software Engineering
Computer Creativity
Operating Systems
Computer Networks
Advanced Data Structures
Formal Language Theory
Truth, Deduction, & Computation
Cryptography

Interests

Internet Privacy & Net Neutrality
IoT & Smart Home Devices
Cars & Autonomous Tech
Machine Learning & AI

Active Sports

Ultimate Frisbee, Soccer
Snowboarding, Swimming

Projects

Software Engineer, Adaptive Robot Chassis Jun. 2019 – Jun. 2020

- ❖ Designing a unique, application-agnostic robot platform to collectively satisfy vehicle needs for multiple industrial partners
- ❖ Building a robust REST API on top of ROS12 to provide “plug and go” integration with a variety of open-source hardware

Software Engineer, SET++ Aug. 2019 – Dec. 2019

- ❖ Led a three-member SWE team to improve SCU's existing *Student Evaluation of Teaching (SET)* system
- ❖ Created a dynamic Flask application with a PostgreSQL database from the ground-up to work independently from the school's existing system

Software Engineer, AUV Aug. 2014 – Dec. 2016

- ❖ Led the software team to design a JavaScript program to interface with various sonar sensors and motors to control an *Autonomous Underwater Vehicle (AUV)*
- ❖ Co-led the electrical team to design and implement efficient and safe wiring in waterproof housing