Ryan Ku

software engineer

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https://ryanku98.github.io

Education

Santa Clara University
M.S. Software Engineering
September 2019 – June 2021

Santa Clara University
B.S. Computer Engineering
Mathematics Minor
September 2016 – June 2020
Cum. GPA: 3.5/4.0
Major GPA: 3.8/4.0

Skills

Programming
Python • C++ • C • Java • JavaScript • Flask • HTML • CSS

Tools and Operating Systems
Git • Android Studio • Windows OS • Mac OSX • Linux (Ubuntu/CentOS)

Coursework

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

Interests

Internet Privacy & Net Neutrality
IoT & Smart Home Devices
Cars & Autonomous Tech
Machine Learning & AI
Statistics & Numbers
Ultimate Frisbee, Soccer

Experience

June 2019 – August 2019 *Washington, DC*

Software Associate • Summer Intern • Anzu Partners

- Built software tools to interface with various APIs to streamline and automate resume collection and funneling
- Helped develop Flask application to interface with proprietary NIR spectrometer and map data
- Participated in diligence efforts as well as pitch calls with various software startups

June 2018 – August 2018 *Santa Clara, CA*

Network Engineer • Summer Intern • Hillstone Networks

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

Projects

ChassisBot

Lead Software Engineer *June 2019 – present*

- Designing a unique, application-agnostic robot platform to collectively satisfy vehicle needs for multiple industrial partners
- Building a robust REST API to provide “plug and go” integration with a variety of open-source hardware (e.g. sonar sensors, cameras, motors, etc.)
- Creating and implementing a level 2+ autonomous driving system as proof-of-concept for API package and robot platform

Autonomous Underwater Vehicle

Lead Software Engineer *August 2014 – December 2016*

- Participated as a high school team in the 2015 Robosub competition for autonomous underwater vehicles (AUVs)
- Led the programming team to design a program to run on Beagleboards to interface with various sonar sensors and motors in JavaScript
- Co-led the electrical team to design and implement efficient and safe wiring in waterproof housing