

Ryan Ku

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Education

Santa Clara University, Santa Clara, CA, United States

B.S. Computer Science and Engineering, Expected Graduation: June 2020; GPA: 3.4; Major GPA: 3.8

Skills

Programming Languages: C++, C, Java, Python, JavaScript, ARM Assembly, HTML, CSS

Operating Systems and Tools: Windows OS, Mac OSX, Linux (Ubuntu/CentOS), Git, Android Studio, Verilog, Intel Quartus, EmBitz

Work Experience

Hillstone Networks, Santa Clara, CA

June 2018 – August 2018

Network Engineering Intern

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

Galileo Learning, San Carlos, CA

June 2017 – August 2017

Lead Instructor

- Taught 3D printing through TinkerCad to middle schoolers
- Helped modify curriculum to adapt to each new class of students to create a more fun and engaging learning environment
- Heard back from initially uninterested students that my class changed their mind and attitude towards the topics taught in class

Personal Projects

Python Software to Enable Interfacing with Specific Eye-tracking Hardware (in progress)

- Attempting to use Python-based psychological experiment-building software *PsychoPy* to interface with eye-tracking equipment produced by SensoMotoric Instruments (SMI)
- Aiming to allow this feature to work across multiple platforms (specifically targeting Windows OS & Mac OSX)

Golf Score Tracker

- Built an Android application in Java with a custom GUI to track and categorize golf scores based on location and time
- Created and implemented a text-based save file format for users to retrieve old scores
- Used GPS tracking to suggest previously-visited golf courses when saving scores

Multi-threaded File Transferring Software

- Created C programs to transfer files between two computers running Linux
- Built programs based on TCP and UDP protocols and used the C socket library
- Implemented multithreading with POSIX threads in Linux to optimize runtimes

Leadership

EasyAs.Py

January 2016 – May 2016

Co-Instructor

- Taught an introductory-level Python weekly course to 25 middle-school students
- Designed the course to track the progress and capability each individual student
- Created individualized homework and discussion plans

SAS Autonomous Underwater Vehicle Club

August 2014 – December 2016

Programming Team Leader

- Participated as a high school team in the 2015 Robosub competition for autonomous underwater vehicles (AUV)
- 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