

# Samuel A. Hinshelwood Jr.

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## Education

**Stanford University**, B.S. in Computer Science, concentration in Mechatronics & Human Computer Interaction

April 2018

## Experience

**Apple, Inc.**, *Mobile Systems QA Automation, Intern, Cupertino, CA*

June 2016 – Sep 2016

Develop a real-time Device Monitoring & Triage system: Test Launcher, Image Recognizer, and Web App  
Train OpenCV Classifiers to recognize devices and test progress on-screen; auto-report results to Web App  
Prototype device harnesses with CAD software, 3D print and assemble multi-tiered test racks  
Develop and launch Web App (server, webpage) visualizing device test progress and image recognition  
Automate scripts for launching device tests, collecting diagnostics, and reporting results to SQA team

**Qualcomm, Inc.**, *Interim Engineering Intern, San Diego, CA*

June 2015 – Aug 2015

Developed RIDL diagnostic software features for Android devices, tailored to China OEMs  
Researched framework for internal, automated device testing, provided next-steps consulting  
Created threaded program for stress-testing diagnostic server

**Stanford Residential Computing**, *Resident Computing Consultant, Stanford, CA*

Sept. 2015 – Present

Teach Stanford CS courses on networking, security, and digital media  
Manage residential network hardware, university registration databases, and computer cluster

## Skills

<b>Languages</b>	Experience with: Swift 2 & 3, Python, C++, C, JavaScript, Arduino C, Java
<b>Frameworks</b>	CocoaPods, OpenCV, MEAN Stack, iOS 10, Xcode, Git
<b>Software</b>	SolidWorks & other CAD, Adobe Creative Suite, MATLAB, LaTeX, Fritzing
<b>Personal</b>	Project Design, Communication, Education

## Projects

**Rise App**, Full Stack iOS (Swift) Engineer, Stanford University

Full stack development of the Rise iOS app (See it here!: [bit.ly/29qUDbM](http://bit.ly/29qUDbM)). Designed UI/UX, developed backend with Google Firebase and Core Data. Performed A/B testing. Rise is a platform for crowdsourcing visual stories.

**Haptic Touch Finger**, *Project Manager, Hardware Engineer, Stanford, CA*

April 2015

Stanford HackOverflow Hackathon 1<sup>st</sup> place project. Invoked the ability to “feel” virtual objects using a Leap Motion Controller interfaced with Arduino and mini-buzzer motors via leap.js and JSON packages.

**Automated Laser Turret**, *Project Manager, Educator, Stanford, CA*

Sept 2015

Built laser-shooting bot “arm” with 3-axis motion using Arduino. Used for teaching introductory-level engineering workshops to lowerclassmen students in BYTES Program.

**Object Avoiding Robot**, *Individually Designed, Chicago, IL*

August 2014

Designed 2-wheeled, self driven bot that avoids objects using Arduino

**Gyroscopic Wii Remote Mockup**, *Individually Designed, Chicago, IL*

January 2015

Designed IR-Bluetooth-integrated device that utilizes gyroscopic feedback and transmits data

## Awards & Organizations

**BYTES Program, Stanford Service Organization of the Year, 2016**

Dec. 2014 – June 2016

Founder of BYTES Engineering-Service Projects Program within Society of Black Scientists and Engineers  
Taught technical workshops covering engineering fundamentals. Fund & support student-designed projects