# **Steven Yue**

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#### **EDUCATION**

Cornell University, College of Engineering, Ithaca, NY

**Expected May 2018** 

Bachelor of Science, Electrical and Computer Engineering Computer Science Minor

GPA: 3.56; Dean's List, Fall 2015

**Relevant Courses:** Design with Microcontrollers, Embedded Operating Systems, Computer Architecture, Embedded Systems, Microelectronics, Objected-oriented Programming, Mechatronics

### INDUSTRY EXPERIENCE

Sony Corporation, Atsugi, Japan, Marketing Engineer Intern

Jun-Aug. 2016

- Arranged technical promotion support of professional network camera products
- Designed and implemented a wireless camera management solution on Unix platform in 2 weeks using python flask server as the server, python-wrapped C library as USB interface, JavaScript-based HTML as front-end
- Modified and recompiled the original mjpg-streamer in order to generate a Motion-JPEG stream with in flask framework to enable LiveView for cameras
- Altered the original ActiveX-based Storage Calculator web application into pure JavaScript-based HTML
- Presented the new UMC-S3C and SNC-VB770 product at a global line-up conference

## Phoenix Contact, Nanjing, China, Intern Process Engineer

Jan 2016

Collaborated with engineer colleagues, drafted and presented a Lean Production Solution for wave-soldering and SMT lines

#### ENGINEERING EXPERIENCE

Cornell University Unmanned Air Systems, Ithaca, NY, Electrical and Business Team Member

Fall 2015 – Present

- Designed and engineered a fully working antenna tracker that holds the directional antenna and rotates itself to follow the aircraft in real-time for controlling the aircraft
- Integrated a Raspberry Pi running python GPS-calculation script, an Arduino Mega running PID algorithms and a motor shield driving azimuth and elevation motors together into a smoothly working system
- Drafted, filmed and edited a 3-minute professional-grade promotion video that got viewed 4000+ times in 5 days

# Final Project: ARM-based Music Rhythm Game, Ithaca, NY

**Apr, May 2016** 

- Drafted, designed and implemented a Music Rhythm Game similar to Osu! Mania based on an ARM-processor FRDM-K64F board for Embedded Systems. Achieved top selection of the class and got featured on ARM University's website
- Integrated a NES peripheral controller, LED Matrix display and a SD card reader to allow user to load game maps on SD card, control with the controller, therefore increased user experience
- Programmed a dynamic hash-table structure for reading map data from card into limited memory space while still smoothly
  operating the game (loading while playing)

### Project: Public Discussion Forum, Ithaca, NY

**Fall 2015** 

• Designed and constructed a python flask application that hosts a public discussion forum for funny image posts that used SQLite for data storage and image links and Amazon AWS for web hosting and elastic IP

### Final Project: Sumo Wrestling Robot, Ithaca, NY

Fall 2015

- Collaborated with two partners to prototype, assemble and program an Arduino Sumo wrestling robot that participated in the Mechatronics final competition and won 8<sup>th</sup> place
- Fabricated the H-bridge with own design and built CD-CG amplifiers to efficiently toggle the H-bridge
- Adapted fine machining to produce the chassis of the robot and implemented a software emergency strategy during the wrestling for better performance

### SPECIALIZED SKILLS

Programming Languages: Java, JavaScript, Python, C++, C#, C, MATLAB, SQL, HTML, UNIX, Verilog

Microcontrollers: Arduino, Raspberry Pi, PIC32, Particle

Software: Adobe Photoshop, Premiere Pro, After Effects, Audition, PowerPoint, Excel

Languages: Chinese (native), English (fluent), Japanese (intermediate)