

# John Ryan

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## EDUCATION

### **SANTA CLARA UNIVERSITY | MS IN ENGINEERING MANAGEMENT AND LEADERSHIP | TECHNICAL FOCUS IN COMPUTER ENGINEERING**

College of Engineering | Expected June 2020 | Santa Clara, CA

Cum. GPA: 4.0

Relevant Coursework: Managerial Accounting • Internet of Things Development and Design • Machine Learning

### **SANTA CLARA UNIVERSITY | BS IN COMPUTER SCIENCE AND ENGINEERING**

College of Engineering | June 2019 | Santa Clara, CA

Cum. GPA: 3.45

Relevant Coursework: Software Engineering • Object Oriented Design, Analysis, and Programming • Theory of Algorithms  
• Abstract Data Structures • Database Systems • Compilers and Formal Language Theory • Computer Architecture

## RESEARCH

### **NAVSENSE: COMPUTER VISION FOR THE VISUALLY IMPAIRED | LEAD DEVELOPER**

Sep 2018 – Present | Santa Clara, CA

Developed an assistive device for the visually impaired using machine learning and computer vision on the Google Coral EdgeTPU Platform. System facilitates object recognition to identify potential hazards and notify the user to aid in navigation. Reduced embedded systems inference time by 50% with no inference power usage increase by leveraging USB AI Hardware Accelerator technology to increase machine learning processing performance.

#### **Computer Engineering Technical Excellence Award**

May 2019 | SCU Computer Engineering Department

Awarded to NavSense: Computer Vision for the Visually Impaired. The project was determined to be "distinguished by an exceptionally high degree of technical and scholarly achievement."

#### **Session Winner in the 2019 Senior Design Conference**

May 2019 | Santa Clara University College of Engineering

Winner of our conference session as determined by industry judges for the presentation of NavSense: Computer Vision for the Visually Impaired.

### **SLAC NATIONAL LABORATORY AND STANFORD UNIVERSITY | UNDERGRADUATE RESEARCHER**

Sep 2018 – Dec 2018 | Menlo Park, CA

Worked with a researcher from Stanford and a team of Carnegie Mellon graduate students developing a system for solar power data aggregation. The project encourages users to share their real time high resolution energy usage to aid in more accurate energy production and usage prediction. Developed a code base to automate the orchestration of cloud infrastructure for data processing, storage, and management using Terraform.

## EXPERIENCE

### **CODE HOBBITS | SITE MANAGER**

Jan 2018 – Sep 2018 | Fremont, CA

Summer and after-school program hosting classes in subjects such as robotics, video game and app development, and virtual reality. I managed parent relations and two instructors and developed curriculum for several classes.

### **CODE HOBBITS | LEAD INSTRUCTOR**

May 2017 – Jan 2018 | Fremont, CA

Instructor for Engineering and Entrepreneurship, a class teaching product development, manufacturing, and marketing skills. I designed curriculum and taught classes including Virtual Reality, Wearable Electronics Development, and JavaScript Game Development.

### **RUI YUAN WEN DE COMPANY | INTERN**

Aug 2015 – Sep 2016 | Beijing, China

Forensics and security product distributor in China. Located at the main office in Beijing. I developed marketing material for the cyber-security department and studied Mandarin.

## SKILLS AND AWARDS

### **LANGUAGES, FRAMEWORKS, AND LIBRARIES**

• Java • Python • C/C++ • HTML/CSS • Javascript • Verilog • Django • Bootstrap 4 • Java Swing

