YAN SONG KE

Mechatronics Engineering at University of Waterloo



Skills

Languages: C++ (Proficient, 3+ years), Python (Proficient, 2+ years)

Web technologies: HTML, CSS, AngularJS

Tools: Git, SOLIDWORKS, AutoCAD, Arduino, RobotC, Bootstrap, Jekyll

Projects

Syncin | devpost.com/software/synchin

Sept 2016

- iOS and web application created to streamline networking in job fairs using iBeacons
- Exchanges contacts, resumes and key information between job hunters and employers
- Designed and pair programmed the web application using AngularJS and Firebase
- Led team discussions through iterations of design process and found opportunistic code reuses for depreciated code

APPC Wind Tunnel

Dec 2015 – Feb 2016

- Designed and constructed a wind tunnel capable of detecting aerodynamic forces on airfoils in real time
- Controlled using Arduino microcontroller and interfaced through a MatLab GUI

NXT Mindstorm Table Tennis Trainer

Nov 2016 - Dec 2016

- Designed an autonomous table tennis ball shooter using 3-D printed gears, lasercut acrylic, and NXT sensors
- Programmed and created user interface in RobotC C based language

Personal Website | yanske.me

Dec 2016

- Created an online portfolio using **HTML**, **CSS** and **Bootstrap**
- Built using Jekyll on Ruby, used liquid markup to create modular projects section

Experience

Machine Learning Engineer – UW BioTron (Powered Arm)

Sept 2016 - Present

- Implemented filters in C++ for biomedical signals received from Myo
- Used support vector machine to train data sets in Python

Director of Web Operations – TOPS Program Marc Garneau C.I. Sept 2012 – June 2016

- Executive of TOPS program website, mentored and managed developer team
- Created online registration and handled user data during admissions period

Real Estate Assistant – AimHome Realty Inc. Brokerage

July 2015 - Sept 2016

- Communicated with clients and lawyers to finalize documents and sales
- Researched and documented property information, maintained agent's website

Education

University of Waterloo

Sept 2016 - Present

- Candidate for B. ASc., 95.5% cumulative average
- Relevant courses: Digital Computation, Data Structure and Algorithms

Marc Garneau C. I.

Sept 2012 - June 2016

• Enrolled in Talented Offering for Programs in the Science

Interests

- Guitar, cooking, photography, Judo, tea blending
- Hopeful owner of a small café in the near future