





# YAN KE

1B Mechatronics Engineering at University of Waterloo

 yske@edu.uwaterloo.ca  
 www.linkedin.com/in/yanske  
 www.github.com/yanske1  
 www.yanske.me

## Skills

**Proficient:** C/C++, Python

**Prior Experience:** HTML, CSS, AngularJS

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

## Projects

**Syncin** | [devpost.com/software/synchin](https://devpost.com/software/synchin)

Sept 2016

- iOS and web application created to streamline networking in job fairs using **iBeacons**
- 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

**EasyPassword**

Dec 2016 – Present

- Implemented SHA256 hash using **OpenSSL** and public key encryption to store data
- Currently using **OpenCV** to implement user facial recognition in **C++**

**APPC Wind Tunnel**

Dec 2015 – Feb 2016

- Designed and constructed a wind tunnel capable of detecting atmospheric data and aerodynamic forces on airfoils in real time
- Programmed and integrated an **Arduino** microcontroller with **MatLab**

**NXT Mindstorm Table Tennis Trainer**

Nov 2016 – Dec 2016

- Designed an autonomous table tennis ball shooter using 3-D printed gears, laser-cut acrylic, and NXT sensors
- Programmed and created user interface in **RobotC**

**Personal Website** | [yanske.me](http://yanske.me)

Dec 2016

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

## Experience

**Machine Learning Engineer – UW BioTron (Powered Arm)**

Sept 2016 – Present

- Implemented filters in **C++** to process biomedical signals received from Myo
- Currently using **support vector machine** to train data sets in **Python** and **C++**

**Director of Web Operations – TOPS Program Marc Garneau C.I.**

Sept 2012 – June 2016

- Executive of the 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., expected graduation in 2021
- Relevant courses: *Digital Computation, Data Structures and Algorithms*
- 95.5% cumulative average

## Interests

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