

# YAN KE

Software Engineering at University of Waterloo

 [yske@uwaterloo.ca](mailto:yske@uwaterloo.ca)  [itsyan.me](http://itsyan.me)  [github.com/yanske1](https://github.com/yanske1)  +1 (647) 262 0026

## Skills

### Languages:

- C / C++
- Python
- Java
- JavaScript
- HTML / CSS
- SQL

### Web / Mobile:

- Android
- ReactJS
- Flask
- PostgreSQL

### Tools:

- Git
- Unix
- GDB / Valgrind
- Jira

## Education

### University of Waterloo

2016 - Present

- Candidate for Bachelor of Software Engineering, expected graduation in 2021
- **First** in class for Fall 2016 & Winter 2017, 96% cumulative average

## Interests

- Hopeful part-time owner of a small café
- Cooking, badminton, Judo, photography

## Experience

### Software Engineering Intern – Aterica Health Inc.

Internet of Things Start-Up | Waterloo, Ontario | May 2017 - Present

- Developed Bluetooth, UI, and networking features for our Internet of Things **android** application
- Created internal test management tools and scripts using **ReactJS** and **Python**
- Implemented support for new features in our **Java** infrastructure
- Managed **Postgres** database, assisted with software testing

### Software Developer – UW Biomechanics

Student Design Team | Waterloo, Ontario | Sept 2016 - Present

- Implemented biomedical signal processing filters in **C++**
- Trained a linear classifier to control a robotic hand on Raspberry Pi, controlled using the Myo

## Projects

### EasyPassword (*Ongoing*)

Password management application using facial recognition

- Implemented cryptographic hash and symmetric encryption using **OpenSSL**
- Using **OpenCV** to implement eigenface facial recognition in **C++**

### Sync In

Streamlined exchange of networking information using iBeacons

- Developed data visualization platform using **AngularJS** and **Firebase** which manages received data from our iOS app

### APPC Wind Tunnel

Wind tunnel capable of measuring aerodynamic forces on airfoils

- Integrated **Arduino** microcontroller with **Matlab** to create GUI
- Designed wind tunnel frame in **AutoCAD**, interfaced sensors

### NXT Table Tennis Trainer

Autonomous Ping-Pong ball shooter

- Implemented loop processing algorithm and UI in **C**