

# SAMANTHA FENG

2B Biomedical Engineering  
Student at University of Waterloo



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## EXPERIENCE WITH:

C#, C++, MATLAB, Arduino, PHP,  
MongoDB + JSON Schemas,  
HTML/CSS, Jekyll + Markdown,  
Git, SolidWorks, R, Drupal, Linux,  
Project Management

## FAMILIAR WITH:

Java, JavaScript (NodeJS, ReactJS),  
MySQL, SharePoint, Python

## IN MY SPARE TIME:

Soccer + lacrosse player, knitter,  
skater + skier, avid traveller

## RELEVANT EXPERIENCE

### Web + Technologies Developer

Jan – Apr 2017

*Ontario Institute of Cancer Research – Toronto, Ontario*

- Completed project management tasks relating to web development: feature analysis, task and ticket delegation, competitive analysis
- Tested and developed website features in an Ubuntu system using a local environment generated by VirtualBox and Vagrant
- Backed up MySQL databases for websites connected to a CMS
- Created database queries for MongoDB collections on a remote server by comprehending JSON Schemas for data
- Collaboratively coded by Bitbucket and understanding Git basics
- Styled ReactJS forms in a web application using CSS and webpack
- Solved production issues reported by clients for Drupal websites by modifying PHP templates, creating new content types, and styling of CSS

### Technical Analyst

Apr – Aug 2016

*LOGiQ<sup>3</sup> Corporation – Toronto, Ontario*

- Provided effective end-user support by troubleshooting technical issues
- Utilized CSS and SharePoint Designer to update company's intranet site
- Addressed all user requests and device updates in a timely manner

### English Teacher

Mar – Jul 2015

*YouLang English Center – Hangzhou, China*

- Generated lesson plans for teaching English to Chinese students preparing to study in a foreign country

## PROJECTS

### Processing and Filtering of IMU Data

May 2017 - present

- Analyzed and filtered inertial data in Python dataframes
- Employed signal processing methods such as converting to data to global coordinates and removing bias and random walk variables

### Freezing of Gait Detector

Nov 2016 – Dec 2016

- Created working Arduino circuit for a portable medical device detecting and alleviating freezing of gait in Parkinson's disease in real-time
- Utilized MATLAB to analyze inertial data collected by circuit

### Data Analysis Project

Nov 2016

- Utilized R to analyze patterns of epithelial cells on the corneal surface resulting from the usage of contact lenses

## EXTRACURRICULAR ACTIVITIES

**Operations Associate** – Engineers in Medicine

Sept 2016 – present

**Engineering Ambassador** – University of Waterloo

Jan 2015 - present