# Sarim Zafar

sarimzafar.io github.com/sarimzafar shzafar@uwaterloo.ca in/sarimzafar

#### **Skills**

- Java, Ruby, JavaScript, Python, C#, HTML, CSS, MySQL, PostgreSQL
- Ruby on Rails, React-Redux, Enzyme, Scikit-learn, NodeJS, Angular, Mocha, .NET MVC
- Experience working in an agile environment with tools such as Git, BitBucket, JIRA and Jenkins

### **Professional Experience**

Think Research Corp. — Software Engineering Intern - Platform Team

Fall 2016

- Decomposed a single monolith Rails application into resilient microservices and improved performance by 55%
- Rewrote application front-end in a test-driven manner using React-Redux and Enzyme
- Self started and managed a Machine Learning prototype for patient identification using Scikit-learn in Python

**Deloitte Innovation Lab** — Software Product Prototyper, Deloitte Communitech Space

Winter 2016

- Prototyped and developed a real-time web application using the MEAN stack, MySQL, WebSockets
- Built a personalized Slack bot using Botkit and Rails API to conduct automated employee surveys

**BDO Solutions** — Software Engineering Intern

Fall 2014 & Summer 2015

- Successfully developed a real-time error tracking system for a multi-page application using C# and JavaScript
- Created an MVC based .NET web application used for processing mining data using C#, SQL and jQuery

**RBC Global Technology and Operations** — Quality Assurance Co-op

Winter 2014

• Conducted independent testing of a major sales application and discovered over 75 defects

## **Projects**

**Patient Identification System** 

Fall 2016

- Designed and implemented a machine learning model to identify patients based on physical features
- Used the K-means clustering algorithm to achieve an accuracy of 88.9%

FatBot — Hack the North 2016

Fall 2016

- Built a Facebook Messenger Bot that automates the process of diet-tracking using Natural Language Processing
- Awarded the Best Hack by Bloomberg L.P and Runner-up for the Google Cloud API Prize out of 60 projects

RetrospectIQ Winter 2016

- Developed a multi-platform web application that assists agile coaches in better assessing team transitions
- Built the application using Node and maintained real-time data flow using Socket.IO and Angular.JS

# **Research and Teaching**

Undergraduate Research Assistant - Video Processing Lab

University of Waterloo, Winter 2017

- Currently working under Prof. Zhou Wang on video processing and encoding algorithms
- Responsible for building a web tool that rates the user's video viewing experience using complex algorithms

Teaching Assistant

Performed academic tutoring in Data Structures and Algorithms, Calculus and Circuits over the last 7 terms

#### **Education**

University of Waterloo - Bachelor of Applied Science in Mechatronics Engineering

**Graduating 2018** 

University of Waterloo

Third year student with minor in Cognitive Science

**GPA 3.6**