

# Sarim Zafar

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## 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%
- Refactored 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** – *Python, Scikit-learn* Fall 2016

- Designed and implemented a machine learning model to identify patients based on physical features
- Applied clustering and classification techniques to match the unidentified patient to an existing one

**FatBot** — Hack the North 2016 – *JavaScript ES6, FB Messenger Platform, Google Cloud NLP API* 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** – *Node/Express, Angular.JS, Socket.IO* 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 University of Waterloo

- Tutored Data Structures and Algorithms, Calculus, and Circuits over the last 7 years

## Education

University of Waterloo - Bachelor of Applied Science in Mechatronics Engineering Graduating 2018

- Third year student with minor in Cognitive Science GPA 3.6