# Jerry Zhao

3A Computer Science

- ✉ jr3zhao@edu.uwaterloo.ca
- 🌐 jerryzhao.me
- 📞 (647)836-5368
- in jr3zhao
- ○ jr3zhao

## Skills

### LANGUAGES

Java
JavaScript
C++
C
Swift
R
Python
Bash
Racket/Scheme

### WEB TECHNOLOGIES

Java EE
ReactJS
AngularJS
Vue.js
MySQL
Sass
JSP/Servlet/JDBC
AJAX
AWS

### TOOLS

Eclipse
Git
HeidiSQL
Jira
Wireshark
Maven

## Education

University of Waterloo
Computer Science 2020

## Experience

### 360 Education Labs
Toronto, Canada
Full Stack Developer
May 2017 - Aug 2017

*Java EE (JSP/Servlet/JDBC), ReactJS, AngularJS, MySQL, CSS3, AWS, jQuery, HTML5, PHP, Flux (Alt.js)*

- Reduced loading time for large datasets by 90% with the use of dynamic function loading
- Implemented front and back ends for a service that allows users to attach their media files from the main platform into Moodle, Learn, or Brightspace
- Prototyped and developed an interactive video quizzing platform with AWS S3 and HTML5 that is used by thousands of students and instructors
- Designed, implemented, and maintained a video capture interface with an extensive access control system
- Developed a single sign-on system for SAML and OAuth 2.0 which is used to restrict media access to authenticated users
- Created a capture scheduler which parses XML input and automatically starts recording on remote devices
- Assisted in optimizing a media player controller with AngularJS and MySQL
- Integrated new application features into external learning management systems like Brightspace and Canvas
- Built fully tested React components while strictly following WCAG 2.0

### Siemens Canada
Toronto, Canada
Software Developer
May 2016 - Aug 2016

*NodeJS, AngularJS, RequireJS, jQuery, CSS, Bootstrap*

- Implemented features to the DLUX web application using jQuery and NodeJS
- Developed Bash scripts for Maven to automate project build and deployment
- Used Wireshark to analyze network behavior under different configurations
- Completed a research project on software-defined networking, which includes a report and a software demo

## Projects

### Navigation App
*An Android app that tracks user movement and displays their location on screen*

- Implemented a depth-first search to calculate shortest paths
- Designed a noise-reduction algorithm to allow for accurate movement recognition

### Pet Simulator
*A 2D simulation game developed using Java's AWT and Swing*

- Designed an authentication system with SHA-512 password hashing
- Strictly follows the object-oriented design principles to allow for scalability

### 2048
*A web implementation of the game 2048 using ReactJS*

- Implemented move validation algorithms
- Created unit tests for React components

## Awards

**Top 2%** · Canadian Computing Competition (Senior)
Feb 2015
Across 3600 contestants

**Term Dean's Honour List**
Jan 2017
Awarded to students with an average of 87% or higher