Alex McCallum

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Work Status

Available for work in May 2018.

Education

Dalhousie University, Halifax, NS   September 2012 – May 2018
Bachelor of Science, Computer Science major.

Skills

Java Development	jUnit, Gradle, Android, Espresso, JavaFX
Programming	Python, C++, Go, Bash
Software tools	Git, Jetbrains IDE, Jira, Jenkins, Docker
Operating system	Linux, Windows
Client-side programming	Javascript, AngularJS, Ionic, jQuery
Server-side programming	Node.js, Django
Database	MongoDB, SQL
Web design	CSS, Sass, Less, Bootstrap
Communication	Public speaking, professional documents
Leadership	Organizing and leading events, group problem solving

Work Experience

Ultra Electronics   September 2017 - December 2017
Software Engineer

- Restored and updated legacy code base, tests and configured the project to run in Docker and on Jenkins.
- Worked on various services of a highly configurable large scale C++ and Java microservice project managed by supervisord.
- Developed components for an Eclipse RCP / JavaFX application that interfaced with the microservice project via ZeroMQ channels.
- Created and optimized unit tests written in Gtest and acceptance tests written in the Robot framework.

Gracenote   January 2017 - April 2017
Full Stack Web Developer

- Developed a new Node.js api working extensively with MongoDB to form complex aggregate queries.
- Created a data management tool in AngularJS for non-technical co-workers to manage clients website data across development enviroments.
- Developed in an agile work environment using Jira for tracking tasks and velocity.
- Debugged and developed a codebase with hundreds of sports widgets in AngularJS and Node.js using Webstorm.
- Developed a custom AngularJS directive for implementing an efficient scrolling table solution and tested for cross browser compatibility using browser stack.

CWD Law Incorporated   May 2016 - August 2016
Full Stack Web Developer

- Completed the co-op work term objective of developing a prototype web application for the company to present to users.
- Worked on all aspects of the sites development, such as the sites design, code base and business logic.
- Worked on a pre-existing code base in Django, Bootstrap and jQuery and used Git for source control.
- Effectively communicated technical aspect of my work at the company to non-technical boss.

Calculus Tutor   January 2015 - November 2015

- Taught calculus to a high school student who achieved a final grade of A.
- Assessed the aspects of mathematics the student struggled with and developed methods to overcome the student's weaknesses.

Extra-Curricular Programming

Dalhousie IBM Bluemix NS Open Data Hackathon 5th - 6th March 2016

- Placed 2nd out of the 1st and 2nd year student category for creating a web application that helps users find a city to live in Nova Scotia by matching the users preferences with Nova Scotia open data records.
- Responsible for developing the front-end using Bootstrap and back-end using JavaScript in Node RED on the IBM Bluemix framework.

To view more software I have worked on visit my Github: https://github.com/Alexander1994

Academic Achievements

Achieved the Dean's list during the 2014/2015 and 2015/2016 fall and winter semester with an average GPA over the semesters of 3.90.

Accepted into the 2018 UCOSP winter program through Dalhousie for demonstrating strong academic and software development knowledge, to work on open source software for a company such as Mozilla.

Analyzed and wrote a report as part of a group project on the MapReduce process in the Hadoop framework with a focus on the data structures and algorithms involved.

Developed the translation and google maps features for a shark sighting mobile app using Ionic as part of a community outreach course for the shark identification network to increase shark sightings.

Created an Android/Firebase application for users to monitor a greenhouse as part of a software engineer course at Dalhousie. I worked as Dev-ops setting up Android Studio, Github, Travis and the Hexiwear monitoring device. As a developer I created a message board for user to communicate, the logic for the temperature and light views and setup the server to interfacing with the Hexiwear device.