

Alex McCallum

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Summary

I'm a recent graduate from Dalhousie University, Halifax NS, with 3 internships completed at unique companies, I am looking to start a career in the web industry. Specifically I am interested in data mining, client-side development and server architecture. My strongest programming languages are Java, Javascript and Python. I actively code as a hobby, I'm a fan of Linux and I deeply enjoy hiking.

Education

Dalhousie University

Bachelor of Science, Computer Science major

Halifax, Nova Scotia
September 2012 - May 2018

Skills

Java Development	JavaFX, Android, Gradle, jUnit
Data Science	Python, R, Spark, Pandas
Cloud Computing	S3, Elastic Beanstalk, DynamoDB
Client-side programming	AngularJS, Ionic, jQuery
Server-side programming	Node.js, Django
Database	MongoDB, SQL
Software tools	Git, JetBrains IDE, Jira, Jenkins, Docker
Operating systems	Linux, Windows
Web design	Css, Sass, Less, Bootstrap
Communication	Public speaking, professional documents

Work Experience

Ultra Electronics

Software Engineer Intern

Halifax, Nova Scotia
September 2017 - December 2017

- 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 the C++ framework Gtest and acceptance tests written in the Python framework Robot.

Gracenote

Full Stack Web Developer Intern

Halifax, Nova Scotia
January 2017 - April 2017

- Developed a new Node.js api working extensively with MongoDB to form aggregate queries.
- Created a data management tool in AngularJS for non-technical co-workers to manage clients website data across development environments.
- 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 a performant scrolling table solution and tested for cross browser compatibility using browser stack.

CWD Law Inc.

Full Stack Web Developer Intern

Halifax, Nova Scotia
May 2016 - August 2016

- Completed the work term objective of developing a prototype web application with for the company to present to users.
- Worked on all aspects of the web application, such as the site's design in CSS, client application in jQuery, server application in Django and business logic in Python.
- Effectively communicated technical aspect of my work at the company to non-technical boss.

Self-employed

Calculus Tutor

Halifax, Nova Scotia
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.

References Available upon request

Additional Software Experience

Mozilla

Ucosp Research Student

Remote
January 2018 - April 2018

- Worked remotely with students from across Canada under the leadership of data scientist from Mozilla on an open source project to clean web api call data, quantify data leakage and mine for tracking techniques.
- Developed Jupyter notebook for extracting and formatting data from storage/cookie related API calls using Pandas.
- Mined S3 record store of JavaScript web API calls using Spark on a Databricks Python notebook for cookie tracking techniques, such as Evercookies.

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.

Shark Identification Network

Community Outreach Developer

Halifax, NS
September 2016 - December 2016

- As a developer I created 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 for tracking and research purposes.

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.

Created an Android application with a Firebase backend for users to monitor a greenhouse as part of a course at Dalhousie. As Dev-ops I setup Android Studio, Github, Travis and the Hexiwear monitoring device. As a developer I worked on a messaging system, the application logic and setup the server to interface with the Hexiwear device.