Denis Trailin

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EDUCATION University of British Columbia, Vancouver, British Columbia

Sep 2014 - May 2019

Bachelor of Science (B.Sc) in Computer Science

WORK

Bloomberg LP, New York City, New York

May 2017 - Jul 2017

EXPERIENCE

Software Engineering Intern - Feeds Distribution Infrastructure

- Fixed major point of failure for real time news feeds while keeping server high performance and backwards compatible
- Updated distributed uniqueness checking server written in C++ to use an arbitrary number of nodes instead of the previous limit of two
- Added dynamic leadership switching and leadership elections to the uniqueness server using Apache Zookeeper

University of British Columbia, Vancouver, British Columbia

Jan 2017 – Present

Teaching Assistant

- Taught CPSC 213, Introduction to Computer Systems, a course focused on C and assembly
- Led labs of 30 students, graded assignments and invigilated exams

Hootsuite, Vancouver, British Columbia

Jan 2016 - Aug 2016

Co-op Software Developer - Android Team

- Supported transition from Java to Kotlin as main Android programming language
- Worked with other team members to push out critical features such as YouTube streams, Publisher approval streams, and re-auth for the core app
- Wrote 2 blog posts for the official Hootsuite engineering blog on unit testing with RxJava (link) and Kotlin (link).
- Received the maximum possible overall rating of "excellent" in Co-op evaluation from supervisor

Trace Intelligent Systems, Calgary, Alberta

Jul 2015 – Aug 2015

Contractor

- Integrated existing open source object tracking C++ libraries into a common framework for deployment to drones and tripod based cameras
- Performed performance and accuracy profiling of vision tracking algorithms
- Created a human detection model using Dlib's machine learning functionality

EXTRA CURRICULAR ACTIVITIES

UBC Sailbot, Vancouver, British Columbia

Sep 2015 – Present

- Worked on autonomous sailboat that broke record for farthest autonomous crossing of Atlantic
- Built obstacle detection software for thermal cameras using computer vision and machine learning in C++. System had a 0.001% false positive rate (which minimized unnecessary movements) and a detection rate of 40%.
- Created microservice for satellite boat communication in Javascript using Node.js
- Worked on web services for receiving and analyzing boat information written in Sails.js and Angular.js

FIRST Robotics Team 4334, Calgary, Alberta

Sep 2012 - May 2014

- Was key team member during first 3 years of teams existence. During that time the team won 2 regional competitions in addition to becoming division champions at the world championship
- Worked on robot code and implementing key systems such as PID in Java

PROJECTS

Resupplie, nwHacks, Vancouver, British Columbia

Mar 2017

- Built an Internet of Things fridge that uses deep learning to detect food and KNN to recommend recipes and ingredients based on the fridges contents
- Won the CA Technologies 2nd prize for Best IoT hack

Baby Monitor, nwHacks, Vancouver, British Columbia

Feb 2016

- Built an Internet of Things baby monitor using Android, Node.js, and the Intel Edison
- Won 3rd place overall and the CA Technologies prize for Best IoT App with Mobile Interface