Denis Trailin

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EDUCATION	

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University of British Columbia, Vancouver, British Columbia   Sep 2014 – May 2019
Bachelor of Science (B.Sc) in Computer Science

National University of Singapore, Singapore   Jan 2018 – May 2018
Exchange Student

WORK EXPERIENCE

Microsoft, Redmond, Washington   Jul 2019 – Present
Azure Service Fabric - Software Engineer

- Working on Service Fabric, an orchestrator which is used by thousands of services across Microsoft and runs across millions of cores

Microsoft, Redmond, Washington   Jun 2018 – Aug 2018
Azure Service Fabric - Software Engineering Intern

- Increased developer visibility on excessive tracing in Service Fabric, a major problem impacting production observability
- Built an extendable and configurable tool using C# to run simulated Service Fabric loads
- Created tests to detect increases in tracing across builds by measuring statistical deviation from a baseline

Bloomberg LP, New York City, New York   May 2017 – Jul 2017
Feeds Distribution Infrastructure - Software Engineering Intern

- Fixed major point of failure for real time news feeds while keeping the system 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
- Implemented dynamic leadership switching and leadership elections to the uniqueness server using Apache Zookeeper

Hootsuite, Vancouver, British Columbia   Jan 2016 – Aug 2016
Android Team - Co-op Software Developer

- 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
- Published 2 blog posts for the official Hootsuite engineering blog on unit testing with RxJava ⬀ and Kotlin ⬀

University of British Columbia, Vancouver, British Columbia   Jan 2017 – Dec 2017
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

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

PROJECTS

UBC Sailbot, Vancouver, British Columbia   Sep 2015 – May 2019

- Worked on autonomous sailboat that broke the record for farthest autonomous crossing of Atlantic
- Built obstacle detection software for thermal cameras using computer vision and machine learning in C++
- 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

- Joined the team that won 2 regional competitions and a division at the world championships as a founding member
- Worked on robot code and implementing key systems such as PID in Java

Resupplie   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 fridge's contents
- Won the CA Technologies 2nd prize for Best IoT hack at nwHacks