

# Denis Trailin

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EDUCATION	<b>University of British Columbia</b> , Vancouver, British Columbia	Sep 2014 – May 2019
	Bachelor of Science (B.Sc) in Computer Science	
	<b>National University of Singapore</b> , Singapore	Jan 2018 – May 2018
	Exchange Student	
WORK EXPERIENCE	<b>Microsoft</b> , Redmond, Washington	Jul 2019 – Present
	<i>Azure Service Fabric - Software Engineer</i>	
	<ul style="list-style-type: none"><li>Working on Service Fabric, an orchestrator which is used by thousands of services across Microsoft and runs across millions of cores</li></ul>	
	<b>Microsoft</b> , Redmond, Washington	Jun 2018 – Aug 2018
	<i>Azure Service Fabric - Software Engineering Intern</i>	
	<ul style="list-style-type: none"><li>Increased developer visibility on excessive tracing in Service Fabric, a major problem impacting production observability</li><li>Built an extendable and configurable tool using C# to run simulated Service Fabric loads</li><li>Created tests to detect increases in tracing across builds by measuring statistical deviation from a baseline</li></ul>	
	<b>Bloomberg LP</b> , New York City, New York	May 2017 – Jul 2017
	<i>Feeds Distribution Infrastructure - Software Engineering Intern</i>	
	<ul style="list-style-type: none"><li>Fixed major point of failure for real time news feeds while keeping the system high performance and backwards compatible</li><li>Updated distributed uniqueness checking server written in C++ to use an arbitrary number of nodes instead of the previous limit of two</li><li>Implemented dynamic leadership switching and leadership elections to the uniqueness server using Apache Zookeeper</li></ul>	
	<b>Hootsuite</b> , Vancouver, British Columbia	Jan 2016 – Aug 2016
	<i>Android Team - Co-op Software Developer</i>	
	<ul style="list-style-type: none"><li>Supported transition from Java to Kotlin as main Android programming language</li><li>Worked with other team members to push out critical features such as YouTube streams, Publisher approval streams, and re-auth for the core app</li><li>Published 2 blog posts for the official Hootsuite engineering blog on unit testing with RxJava ↗ and Kotlin ↗</li></ul>	
	<b>University of British Columbia</b> , Vancouver, British Columbia	Jan 2017 – Dec 2017
	<i>Teaching Assistant</i>	
	<ul style="list-style-type: none"><li>Taught CPSC 213, Introduction to Computer Systems, a course focused on C and assembly</li><li>Led labs of 30 students, graded assignments and invigilated exams</li></ul>	
	<b>Trace Intelligent Systems</b> , Calgary, Alberta	Jul 2015 – Aug 2015
	<i>Contractor</i>	
	<ul style="list-style-type: none"><li>Integrated existing open source object tracking C++ libraries into a common framework for deployment to drones and tripod based cameras</li><li>Performed performance and accuracy profiling of vision tracking algorithms</li><li>Created a human detection model using Dlib's machine learning functionality</li></ul>	
	<b>UBC Sailbot</b> , Vancouver, British Columbia	Sep 2015 – Present
	<ul style="list-style-type: none"><li>Worked on autonomous sailboat that broke the record for farthest autonomous crossing of Atlantic</li><li>Built obstacle detection software for thermal cameras using computer vision and machine learning in C++</li><li>Created microservice for satellite boat communication in JavaScript using Node.js</li><li>Worked on web services for receiving and analyzing boat information written in Sails.js and Angular.js</li></ul>	
PROJECTS	<b>FIRST Robotics Team 4334</b> , Calgary, Alberta	Sep 2012 – May 2014
	<ul style="list-style-type: none"><li>Joined the team that won 2 regional competitions and a division at the world championships as a founding member</li><li>Worked on robot code and implementing key systems such as PID in Java</li></ul>	
	<b>Resupplie</b>	Mar 2017
	<ul style="list-style-type: none"><li>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</li><li>Won the CA Technologies 2nd prize for Best IoT hack at nwHacks</li></ul>	