

Hi there! I have over 10 years of industry experience with backend systems and infrastructure. Through the Master's program at UBC, I jump-started my career with state-of-the-art research in privacy, security, and distributed systems. My work includes distributed log instrumentation with partial ordering to provide comprehensive flaw detection. I've also worked with secure protocols for RESTful APIs and designed high availability cloud infrastructures for microservices.

EMPLOYMENT

2015-2016: Software Developer, Platform Hootsuite, Vancouver, BC

- Scala microservice API development with YouTube and Facebook integration and authentication to expand social media management analytics with focus on high availability and throughput.
- Seamlessly transition microservice discovery and routing from AWS EC2 classic to an auto-scaling VPC handling an average of 5000 requests per second.

2009-2014: Programmer/Analyst, Systems UBC IT, Vancouver, BC

- Implement an access management federation protocol to work across organizational boundaries with partner universities in collaboration with stakeholders.
- Integrate Shibboleth identity provider for authentication and authorization to migrate all student system applications to single sign-on.

2007-2009: Software Engineer, Backend Elasticpath, Vancouver, BC

2003-2007: Developer, Systems University of Victoria, Victoria, BC

SKILLS

Languages	Scala, Java, Python
Data	Redis, MongoDB, Oracle, SQL Server, MySQL
Deploy	Docker, AWS, Consul, nginx, Continuous Integration/Deploy
Methods	APIs, RESTful Microservices, Agile

EDUCATION

2019: Master's of Science in Computer Science, UBC, Vancouver, BC

2014: Bachelor of Computer Science (part-time student), UBC, Vancouver, BC

2001: Bachelor of Music with distinction, Mount Allison University, NB

RESEARCH

Interests: Privacy, Security, Distributed Systems, Decentralization

2018: NSERC Canada Graduate Scholarship-Master's (CGS M), UBC

- Master's thesis on proxy distribution and defense techniques for Censorship Resistance Systems supervised by Dr. Ivan Beschastnikh.

2017: MITACS Globalink Internship Award, INRIA, Rennes, France

- Decentralization, peer-to-peer networking, and unstructured overlay research mentored by Dr. David Bromberg and François Taïani in the ASAP group.

PROJECTS

2015: Networking/Systems Researcher, UBC bitbucket.org/bestchai/shivector

- Contribute a Python version of ShiVector, a tool that instruments distributed logs with partial ordering information as a Directed Studies student under Dr. Ivan Beschastnikh.

2014: Computer Music Researcher, UBC <https://github.com/jspacek/intelligentcomposer>

- Self-generating melodic composer in C++ based on statistical calculations and music counterpoint theory using networking techniques studying with Dr. Keith Hamel.

VOLUNTEER

2017-2018: Open Privacy Research Society, <https://openprivacy.ca/>

2012-2016: Senior Industry/Academic Mentor, UBC Tri-mentoring Program

2016: Industry Guest Lecturer, Microservices, Distributed Systems CPSC 416, UBC, Vancouver, BC

2015: Hour of Code, Volunteer, Presenter, Hootsuite, Vancouver, BC

2014: GirlSmarts, Volunteer Activity Facilitator, UBC, Vancouver, BC

AWARDS

2018: Canada Graduate Scholarships-Master's Fellowship, UBC, Vancouver, BC

2000: Bell Undergraduate Research Award, Mount Allison University, NB