

# Eric Semeniuc

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## Academic Summary

**School:** UBC **Degree:** BSc (Hons) Computer Science **Year:** 4 **Expected Grad:** May 2020 **GPA:** 3.6

## Areas of Proficiency

- Languages: C, C++, Elixir, Erlang, Go, Java, JS, Ruby, Python, Scala, SQL
- Web: Apollo, Flask, GraphQL, Phoenix, Play, React, Ruby on Rails, Spring
- ML/System: Docker, Julia, Kubernetes, Numpy, Pandas, PostgreSQL, PyTorch

## Experience

Software Engineer Intern at Salesforce

Jun 2019 to Aug 2019

- Developed full-stack release management portal to track and manage SayonaraDB lifecycle
- Reduced data lookups by 80% by consolidating spreadsheets into single GraphQL API
- Codified business processes for release staggers and stages into single document

Software Engineer Intern at Facebook

May 2018 to Aug 2018

- Designed, developed, and pushed full-stack supplier messaging system to production
- Streamlined bid lifecycle by integrating message history and attachments into the bid
- Enabled improvements to scaling and uptime by eliminating Oracle APEX

Software Engineer Intern at Salesforce

May 2017 to Aug 2017

- Developed server health monitoring service with Spring framework and Refocus
- Achieved near real-time reporting using delta updates and Kafka streaming
- Optimized 99<sup>th</sup> percentile response times by 50% by contributing fixes to internal tools

Systems Admin/Software Developer at LEAP Learn

Sep 2013 to Aug 2015

- Increased server security by implementing new security, backup, and recovery measures
- Improved visibility of student progress with custom formative assessment system
- Reduced instructor workload by implementing and managing Moodle eLearning system

## Leadership and Awards

- Awarded Dean's Honour Roll in Applied Sciences at SFU
- Awarded "Excellence in Physics" at SFU by Physics Faculty Chairman
- Successfully launched 10K solid fuel rocket at Spaceport America 2018
- Won "Best use of AWS" award at Angelhack Seattle out of 30 teams as team lead
- Achieved 15th place at ACM-ICPC 2018 out of 85 university teams in Pacific Northwest

## Projects

jetDB (C++, PostgreSQL): A transaction based client-server flight booking and tracking system

- Supports multi-hop flights, code-sharing, group bookings, and least cost path finding
- Automatically buffers and reconnects on unreliable connections with ZeroMQ
- Extensible JSON interface with GUI and CLI clients. Bonus received for features

distChat (Go): A distributed, end-to-end encrypted anonymous chat network. Top 5 class project

- Secure via room unique preshared keys and admin actions such as kick, invite, and mute
- DDOS resilient via peer sharing and flooding, ideal for hostile environments
- Tamper resistant server-server communication with RPC over TLS

seq2caption (PyTorch): A seq2seq based English image captioner

- VGG16 based image encoder with attention layer (for vanishing gradient) feeding a RNN decoder
- bleu4 score of 0.28 with attention, bleu1 score of 0.14 without attention on MSCOCO dataset

**Interests:** Options trading, ACM problems, snowboarding, motorsport, sunset gazing