

Skills

- Fluent in Python, OCaml, Java, C++, Scala, Ruby, SQL
- Passionate about compilers, programming languages, and databases
- Broad range of experience in backend, infrastructure, data, and full-stack engineering

Work Experience

- Jun–Aug 2020 **Software Engineering Intern** | *Facebook* | Seattle, Washington (Remote)
- Developed a best-effort translator between Presto and Spark SQL to facilitate pipeline migration
 - Fully translated over 3000 memory-intensive Presto pipelines to Spark
 - Built a dashboard to track progress and prioritize translation efforts
- Sep–Dec 2019 **Software Engineering Intern** | *Facebook* | New York City, New York
- Designed a Python API for programmatically decoding and inspecting Android DEX files
 - Built a utility to generate semantic and structural diffs between Android APK files
 - Profiled and optimized diffing utility, reducing execution time by a factor of 90
- Jan–Apr 2019 **Software Engineering Intern** | *Facebook* | Menlo Park, California
- Built a more reliable and robust VSCode extension for Pyre, Facebook's Python typechecker
 - Reduced Pyre's startup time by as much as a factor of 8 using a more efficient build process
- May–Aug 2018 **Software Engineering Intern** | *Snowflake Computing* | San Mateo, California
- Implemented compiler and client support for multi-statement query execution
 - Optimized SQL client's handling of array binds to protect the database from degraded performance
- Sep–Dec 2017 **Relevancy Engineering Intern** | *Wish* | Toronto, Ontario
- Reduced the time to build product image similarity graph from 20 hours to 30 minutes
 - Developed a versioning scheme for Redis to enable simultaneous data updates across all Redis nodes
- Jan–Apr 2017 **Data Platform Engineering Intern** | *Shopify* | Toronto, Ontario
- May–Aug 2016 **Software Engineering Intern** | *Veeva Systems* | Toronto, Ontario

Education

- 2020– **Candidate for Master of Mathematics (Computer Science)** | *University of Waterloo*
- 2015–2020 **Bachelor of Software Engineering** | *University of Waterloo*
- Undergraduate Research Assistant (2016): Bazel and Java 9 integration for the Checker Framework
 - Part-time ISA (2018): Instructional support for CS 241E, an intro compilers class
 - Undergraduate Research Assistant (2019): Using static analysis to optimize TrueType font bytecode

Interests

- Court & beach volleyball
- Acoustic guitar, electric keyboard
- Crosswords