



## Languages

Python, C++, C, Scala,  
Golang, Java, SQL, JavaScript

## Tools

Tornado, Flask, MongoDB, Redis  
GRPC/Protobuf

DynamoDB, SQS  
CloudRun, Bigtable, Firestore

Pandas, Scikit-Learn, NLTK  
Keras, TensorFlow, Torch

Git, Linux

## Education

University of Waterloo  
BMath CS / Stats / CO Minor  
Jan 2022

## Technical Interests

Machine Learning/Data Science  
Database Implementation  
Compiler Implementation  
Algorithms (Graph, Randomized)  
Optimization

## More About Me!

My favorite music :)



## Experience

### Software Engineer Intern

Wish | San Francisco, CA

Jan - Apr 2020

- Designed and implemented a product recommendation model for merchants to the Fulfilled by Wish (FBW) program. Achieved a **0.76 F1 Score** on labeled successful FBW products, recommending over **\$500,000 worth of products** weekly
- Implemented Redis data abstractions and microservice endpoints to serve predictions to merchant web app
- Implemented a new product packing algorithm **reducing FBW shipping costs by 14%**

### Lead Data Scientist

Howlurr | Toronto, ON

Ongoing

- Engineered the social feed backend utilizing a pub-sub model
- Developed a content relevancy algorithm for the app's social feed, leveraging reported preferences (e.g. post categories) and unsupervised machine learning (e.g. collaborative filtering)

### Data Science Intern

Clearbanc | Toronto, ON

May - Aug 2019

- Implemented a parallelized model testing framework improving forecast model backtesting speed by **>20x**
- Developed a novel time series classification algorithm detecting erratic revenue patterns achieving a **0.87 F1 Score**
- Worked on a merchant risk classification system to assign different (shorter) repayment periods to high risk merchants
- Developed new revenue forecasting models

### Software Engineer Intern

IBM | Toronto, ON

May - Aug 2018

- Implemented API Key functionality supporting granular access scopes to REST API and web app
- Developed a federated access dashboard to automatically configure permissions of new users accounts based on organizational settings

## Projects

### VM - Vim Clone / C++

- Supports most of vim's core features: movement, visual mode, search, repeat commands, macros
- Implemented a **MVC pattern**, using **nCurses** to display UI

### Scala!? - (subset of) Scala Compiler / Scala

- Compiles a subset of Scala to MIPS assembly
- Languages supports function type assertions, garbage collection (Cheney), lexical scoping and closures