

## Education

### University of Waterloo

Computer Science (9/2016 - 4/2021)

91 Average, Dean's List in 5 of 6 terms

Favourite Courses: Game Theory, Theory of Computation

## Skills

### Programming Languages

Python  
JavaScript  
C/C++  
Golang  
Scheme

### Frontend Frameworks

React  
Angular

### Data Science

NumPy  
Pandas  
Scikit-learn  
Jupyter

### DevOps

Docker  
Kubernetes  
Vagrant

### Cloud environments

AWS  
Azure

### Communication

Client pitches and presentations  
Strong technical and informal writer

## Interests

### Ultimate Frisbee

I've played for my university's school team for three seasons.

I also took on a leadership role on NYU's team while living in New York

### Creative Writing

I write articles about sports and business topics that interest me.

I'm also a hobbyist short story writer.

## Experience

### Data Engineer Munich Re

9/2019 (Ongoing)

- Built and deployed a telemetry-enabled PDF viewer for medical documents
- Implemented role-based content scoping to ensure secure access to sensitive information
- Configured automatic deployment pipelines using Docker, Kubernetes

### Data Scientist Munich Re

1/2019 - 4/2019

- Researched and implemented a parallelized, clustering-based algorithm to reduce dimensionality in datasets with a large number of correlated features
- Developed an interactive tool to interpret black-box models using counterfactuals
- Designed a React web application to visualize feature importance for NLP models

### Software Developer Bonfire Interactive

5/2019 - 8/2019

- Designed a RESTful API to be used across all Bonfire services
- Integrated an Object-Relational Mapping into the API to improve data representation
- Implemented integrated testing protocols to increase testing robustness

## Projects

### PlanUW Schedule planner for uWaterloo courses

Node.js, Postgres

- Features include course exploration, planning and degree requirement visualizations
- Lightweight frontend for blazing fast load times (60KB for all assets)

### GNight Generalized knight simulator and visualizer

C++, OpenCV (7/2019)

- Analyzed movement of general chess knights using BFS and Random Walk algorithms
- Built a path visualization module using OpenCV

### GoCV Templated resume generator

Golang (9/2019)

- Built a resume templator to generate multiple views from common JSON data
- Supports TeX, HTML output with potential to add other formats

## Teaching and Research

### Research Assistant

3D Images (5/2019 - 8/2019)

- Researched algorithms for consistent 3D line drawings
- Implemented a 3D image stylization algorithm in OpenCV
- Supervisor: Lesley Istead

### Teaching Assistant

Math and CS (9/2017 - Present)

- Hosted weekly office hours for first year courses
- Organized and presented end-of-term review sessions for hundreds of students
- Specialties: Functional Programming, Linear Algebra, Statistics