

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)  9/2019 - Present


- 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  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  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  11/2019


- 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)  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)  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)  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)  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