

Experience

Software Engineer Contract	TextQL	2023
- Implemented custom Haskell to TypeScript code generation for all API calls and migrated much of the frontend to use them		
- Eliminated the entire class of frontend/backend API contract synchronization issues in the process		
- Significantly improved developer productivity and confidence in making API contract changes		
- Two week contract		
Software Engineer	Academia.edu	2022
- Worked on a recommendation system that suggested user-relevant works from a corpus of 40 million		
- Led an effort to use larger N-grams when comparing articles using TF_IDF via ElasticSearch		
- Wrote backend for a project to provide recommendations using a linear regression based off of around a dozen factors, including article age, historical popularity, and user on-site engagement that meaningfully improved click-through metrics in a/b testing		
- Diagnosed and presented on a major production problem involving increased “continue reading” sends		
Associate Software Engineer	Fidelity Investments	2019-2021
- Completed the LEAP 4 month program for industry programming. Accepted into the Financial Projections team		
- Developed technical and methodology changes to Monte Carlo financial simulations		
- Implemented necessary changes to methodology on a RESTful web service used by several front-end teams and calling several other services for relevant calculations		
- Co-wrote system to canary-test all services on planning and advice platform		
Teaching Fellow	LaunchCode	Summer 2017
Web Designer	Contractor	Summer 2016

Education

B.S. in Computer Science	Carleton College	Graduated 2018
<i>Classes of Note:</i> Natural Language Processing, Computer Security, Networking, Evolutionary Computation, Graphics, Advanced Algorithms, Operating Systems, Applied Regression Analysis		
Senior Capstone		2017-2018
- Software for Northfield Union of Youth, a drop-in center for at-risk youth		
- Built tracking software for a range of requirements including attendance, activity participation, and staff comments		
- Provided information to design improvements and enable leadership to extend funding with statistical evidence of results		

Skills/Interests

- *Growing up:* Spent 15 years abroad in Moscow, Johannesburg, and Beijing. Traveled extensively
- *Programming Languages:* Ruby, Typescript, JavaScript, Python, Haskell, Elm, Java
- *Technologies:* PostgreSQL, SQLite, Nix/NixOS, ElasticSearch, Angular, AWS (EC2, Route 53, S3), HTMX, HTML/CSS/Less
- *Project Euler:* An online repository of computer science problems (80+ completed)
- *Personal Projects:* Projects of note include a photo filter, a compression algorithms+pipelining library, a Google Forms-style ranked choice voting website, and a Discourse terminal UI