

Software engineer and engineering manager with 12+ years of experience working on web applications that solve real business problems and offer a delightful user experience. Focused on building maintainable and reliable software, as well as creating and leading high-performing and empowered teams.

Experience

Jan 2023 -
Present

Staff Software Engineer

SimSpace, Montreal

- Built a service to synchronize user and organization data to the authorization system Topaz with both realtime and batch syncing capabilities
- Designed a multi-tenancy architecture using Keycloak and created an organization admin self-service console allowing enterprise customers to manage their own users
- Implemented an asynchronous background worker to analyze logs and measure cybersecurity tool effectiveness, in close collaboration with the Data Science team, and set best practices for production-readiness in Python codebases
- Technologies used: Go, TypeScript, Python, Kotlin, RabbitMQ, PostgreSQL, Kubernetes

Jan 2020 -
Dec 2022

Engineering Manager

SimSpace, Montreal

- Engineering manager leading a high-performing and cross-functional feature team composed of product owner, UX designers, frontend and backend engineers
- Improved product delivery flow by establishing clear product requirements, technical designs, meeting notes, increasing frontend and backend collaboration through pairing and API documentation, and building a sense of product ownership among engineers
- Helped create and staff a separate infrastructure team with a focus on CI/CD platform and developer tooling, increasing overall productivity of the engineering organization
- Created a centralized internal engineering documentation site which improved knowledge sharing and retention, with content authored in Markdown that is searchable, discoverable, and version-controlled

Aug 2018 -
Dec 2019

Senior Software Engineer

SimSpace, Montreal

- Backend software engineer, worked on core web platform providing Cyber Range management and Network Specification editing capabilities
- Planned, designed, and implemented major features such as a library of reusable network elements (virtual machine templates, configuration modules)
- Improved the onboarding experience of software engineers by creating a new hire checklist, recording product walkthroughs, and generating a seed database to bootstrap local environments
- Technologies used: Haskell, TypeScript, PostgreSQL, Kubernetes

Sep 2015 -
Jul 2018

Senior Software Engineer

Busbud, Montreal

- Full-stack web developer working on the customer website (busbud.com), as well as backend services (REST API, internal tools)
- Delivered major projects by communicating with stakeholders, designing data models and interfaces, producing technical specifications, and coding the implementation
- Increased confidence in deployment and code maintainability, by introducing TypeScript and other static analysis tools, leveraging a new end-to-end testing framework, improving monitoring and logging, and prioritizing tasks to reduce technical debt
- Improved website performance, by reducing client-side JavaScript bundle sizes, finding opportunities to optimize code execution, implementing pagination for the search page
- Grew the team by interviewing candidates, onboarding new team members, writing documentation, being a prolific code reviewer, mentoring and teaching (gave lunch & learn presentations on TypeScript, and Algebraic Data Types)
- Technologies used: TypeScript/JavaScript, Node.js, React, PostgreSQL, Redis

Jan 2015 -
Aug 2015

Web Developer

Self-employed, Montreal

- Worked with a startup to build the prototype of a solution that helps small businesses manage their data (Haskell, Node.js)
- Built the interface of an MVP used to explore a large database of industry data and visualize key metrics (React, Python)

Oct 2013 -
Dec 2014

Contract Web Developer
Tidepool, Paris & Montreal

- Worked remotely for the non-profit organization whose mission is to reduce the burden of Type-1 Diabetes
- Helped build the core platform which synchronizes diabetes data from many medical devices
- Built with a small team of developers the MVP version of Blip, a web-based data visualization tool
- Technologies used: JavaScript, React, Go

Jan 2010 -
May 2013

Data Analyst
FreshDirect, New York

- Built a web application that aggregates data from multiple systems and generates a demand forecasting Excel sheet
- Implemented a pilot program that uses an innovative cloud-based product forecasting service
- Wrote and implemented several scripts to transform and load data, as well as automate redundant tasks
- Technologies used: Python, Java, Apache POI

Oct 2009 -
Dec 2009

Student Project
Google, New York

- Managed a team of students from Columbia University on a project for Google's Operations Research group
- Used Python to simulate job scheduling in data centers and optimize the algorithm to decrease power consumption

May 2009 -
Jul 2009

Intern Consultant
Cylad Consulting, France

- Worked with a team of consultants for Airbus on the project planning of the Airbus 350 XWB
- Developed an Excel VBA tool to create Gantt charts from the main scheduling platform's data

Education

2009 -
2010

Columbia University
MS in Operations Research, New York

- Selected coursework: Deterministic and Stochastic Models, Corporate Finance, Entrepreneurship, Supply Chain

2007 -
2009

Ecole Centrale de Nantes
MS in Industrial Engineering, France

- Selected coursework: Probability and Statistics, Calculus, Economics, International Strategy

Skills

Languages

Go, TypeScript, Haskell, Rust

Technologies

PostgreSQL, RabbitMQ, Redis, Kubernetes