

About Me

I am a software engineer and architect based in Portland, OR with over a decade of experience in the tech industry. In the past several years, my focus has been on cloud architecture and backend systems. Projects have included a managed service for a highly scalable distributed database, an enterprise SaaS application, and consulting on cloud computing cost savings and best practices. I have additional experience across a wide spectrum, including technical project management, full-stack web development, and command line tooling. More recently, my interest has turned towards systems programming and lower-level challenges.

I value clear development processes and strong security practices. I enjoy continuous learning and working on diverse, kind, and supportive teams. I believe in excellence through iteration. Make it work, make it right, make it fast.

Skills

Languages

- **Python:** Django, Flask
- **JavaScript/TypeScript:** React, Node.js, Gatsby
- **Others:** Go, Rust, Java, PHP, C/C++, 6502 assembly

Systems & Infrastructure

- **Amazon Web Services (AWS)**
- **Google Cloud Platform (GCP)**
- **Linux**
- **Terraform**
- **Ansible**
- **Docker**

Design & Management

- **System Design & Architecture**
- **Technical Project Management**
- **Technical Writing**

Experience

Self-Employed

Independent Software Engineer & Consultant (June 2016–present)

- Engineering, architecture, consulting, technical writing, and project management.
- Project: Nytech (*August 2022–December 2022; March 2023–April 2023*)
 - Sole backend architect and engineer.
 - Designed and built GCP-based infrastructure (managed with Terraform and Ansible), RESTful API (Django REST Framework), chat system (Django Channels), Stripe integration (including Stripe Connect), and other backend application components.
 - Functioned as interim CTO (March 2023–April 2023) to manage technical side of product launch.
- Project: CareerFoundry Cloud Computing Course (*September 2021–January 2022*)
 - Wrote course material (~80,000 words) for cloud computing course; consulted heavily on the course's direction and structure.
- Project: Neurotrack (*November 2021–December 2021*)
 - Restoration of production service for an undocumented legacy system.
 - AWS operational improvements, along with documentation to assist with maintaining the system until it could be decommissioned.
- Project: PhoneSlate (*April 2018–May 2020*)
 - Architecture and development of RESTful API and backend processes to support data processing and messaging (push notifications, Socket.IO).
 - Development of AWS-based architecture (managed with Terraform and Ansible) to support automated scaling, security, and resilience.

Aerospike

Cloud Operations Engineer (Sept. 2020–July 2021)

- Architected and built solutions for AWS and GCP using Terraform, Ansible, and Packer.
- Made core contributions to the Aerospike Cloud Managed Service product.
- Deployed and supported customers with multi-region and highly available infrastructure.

Janrain

Software Engineer (Oct. 2017–July 2018)

- Core product contributions: Development of microservices written in Go.
- Project: Customer Engagement
 - Development of Python-based tooling to map cloud infrastructure, including nearly 100 servers, each with its own unique and complex configuration.
 - Analysis and remediation of infrastructure inefficiencies, resulting in savings of \$7,000 per month in AWS costs.
 - Extensive improvements to operational practices through building Terraform and Ansible tooling to automate infrastructure management and creating improved, accurate documentation.

Technical Support Engineer (May 2017–Oct. 2017)

Enharmonic

Technical Consultant (Sept. 2012–May 2016)

- Project management, system design, QA, infrastructure management, and technical and end-user documentation, primarily working on projects for key client Penguin Random House, including the Living Language and Fodor's product lines.
- Management of a distributed team of developers and testers, coordination between business and engineering partners, and technical project management of development.
- System design and architectural guidance including a custom CMS, RESTful API, ETL processes to load data from multiple editorial sources, and web-based GUI tools for data management.

Education

Western Governors University

- Bachelor of Science, IT - Software Emphasis