

Professional Summary

Accomplished software engineer with 11+ years of comprehensive expertise, including proven leadership abilities as a tech lead, guiding multiple engineering, business, and product teams towards success. Highly skilled in backend and full-stack web development, software architecture, and designing + implementing robust and scalable APIs + distributed systems. Experienced in launching new applications from idea to launch in both startup and enterprise settings. Proficient in software infrastructure + Infra-as-Code (IaC) tools, building CI / CD pipelines, test automation, and a wide range of cloud technologies within AWS and GCP. Enthusiastic lifelong learner with a keen interest in implementing machine learning models and leveraging AI platforms to solve real-world problems. Committed to fostering a culture of engineering excellence and empowering my team to grow and succeed. Actively seeking new challenges as a Staff Software Engineer.

Work Experience

Hippo Insurance

Palo Alto, CA

Senior Software Engineer, Backend

10/2020 – 12/2023

- Lead the design, development, and maintenance for a critical set of backend REST services that was used by all business verticals across the organization. The service had a >99% uptime, an error rate of <2%, and ~ 91% unit-test coverage
- Collaborated with key stakeholders and leaders from product teams, engineering teams, DevOps, QA teams, data science / ML teams, insurance and actuarial specialists, underwriters, legal experts, as well as external partners and vendors to design and develop technical solutions
- Investigated, triaged, and remediated production issues, and created detailed post-mortem presentations and documentation for engineering and product leaders. Identified immediate and long-term fixes to processes in order to avoid future issues
- Resolved a complex data-loss problem caused by concurrent updates by redesigning key DB tables to accommodate the concurrent updates calls with minimal blocking. Data-loss errors went down to 0% with <0.5% increase in API average latency
- Fostered a culture of excellence as a part of Engineering Excellence working group, and participate in cross team code and design reviews to improve overall quality across different engineering teams
- Participated in company and external hackathons; won 2nd place for a recent project: Serving Hippo insurance quotes through a ChatGPT Plugin

WeWork LLC

San Francisco, CA

Software Engineer, Backend

09/2019 – 08/2020

- Developed REST and gRPC services for the HQxWe product line, WeWork's most profitable product
- Created backend functionality for the Grant, a self-service application which allowed WeWork security and HQxWe end users to manage office configurations, user groups, and keycard assignments
- Collaborated with design and frontend engineering teams to design and implement the HQxWe site setup workflow that allows end users to manage their office access zones and user groups, saving the WeWork security team ~10 hours of work per client
- Built a CLI for the WeWork Security Team to bulk-configure security zones for HQxWe office spaces, reducing their processing time from ~2 hours to about ~1 minute per site configuration
- Partnered with frontend and mobile engineers to build a backend service layer using the BFF pattern
- Collaborated extensively with the Identity and Spatial Resource teams in order to help create a visualization of office spaces which reduced user device assignment errors by approximately ~95% (measured by number of tickets)
- Designed and developed tools to generate time-based access reports for office spaces, a feature requested by ~80% of HQxWe users as well as the WeWork security team

The Blackstone Group L.P.

New York, NY

Software Engineer, Full-stack

11/2013 – 03/2018

- Developed large scale, multi-tenant web applications as a full stack engineer for BX business groups
- Developed core functionality that is shared between 10 development teams, such as the document storage framework, workflow automation tools, dynamic SQL query builders, database connection managers, encryption frameworks etc.
- Built cash management and deal closing systems for Strategic Partners in a team of 8. Both automate booking of journal entries, data creation, and payment instructions saving the accounting and treasury teams several hours in time per case
- Built the UI for a “Skills & Expertise” search tool using Salesforce Lightning to help BX deal teams leverage existing contacts and deal information more effectively to perform due diligence (system was undergoing user testing at time of my departure)
- Volunteered to perform application support alongside regular development responsibilities to ensure stability of BX applications for smoother testing, enabling the Quality Assurance team focus on features rather than system reliability
- Created and managed automated build and deployment for BX databases and applications using TeamCity. Improvements in automated deployments have led to ~50% shorter deployment times

Gemprint Corp. | Gem Certification & Assurance Lab

New York, NY

Senior Software Engineer, Full-stack

11/2013 – 03/2018

- Developed software for Gemprint, an optical fingerprinting system for diamonds
- Worked with gemology experts to develop functionality to measure light performance metrics for gemstones using light return, optical symmetry, and scintillation (patent pending; USPTO Application #[20140063485](#))
- Used multi-threading and parallelization in order to speed up diamond centering calculations by 100%, which led to a ~40% productivity gain for lab and manufacturing users
- Developed data models and automated processes to support the Gem lab in processing, grading, and verifying orders for Amazon.com, which helped reduce Gemologists’ processing time by over ~30%

Education

Master of Science in Engineering, University of Pennsylvania

Philadelphia, PA • 12 / 2012

Major: Computer and Information Science (*Early Acceptance into Master’s Program*)

Bachelor of Science in Engineering, University of Pennsylvania

Philadelphia, PA • 12 / 2012

Major: Electrical Engineering

Minors: Engineering Entrepreneurship, Computer and Information Science, Mathematics

Technical Skills

Programming Languages

Python, Golang, TypeScript, JavaScript, Java, C#, C++, C

Databases

PostgreSQL, MySQL, T-SQL, various ORMs

Software Engineering Practices

Agile, Kanban, Test Driven Development, Domain Driven Design

Cloud Services | AWS | GCP

ECS, EKS, S3, SNS / SQS, Elastic Search, GKE, BigQuery

API Design + Development

REST, GraphQL, gRPC, WebSockets, SOAP

Software Frameworks

NodeJS, Express, NestJS, React, NextJS, Django, Flask

CI / CD, Metrics, Monitoring

ELK, CircleCI, Grafana, Prometheus, TeamCity

Distributed Computing

Microservices, Apache Kafka, Airflow, Solr, Storm, Spark, Hadoop

Software Engineering Tools

Git, RabbitMQ, Redis, Elasticsearch, Ansible, Terraform, Vault

Containerization + Orchestration

Docker, Kubernetes, Helm, NGINX, Istio

Machine Learning + Data

TensorFlow, PyTorch, Keras, NumPy, Pandas, Scikit-learn, Matplotlib

Communication + Leadership

Excellent writing, technical design + documentation, public speaking