

SKILLS

System Architecture

Microservices

Kubernetes

AWS

Google Cloud

Rust

Go

TypeScript

Node.js

Python

React

GraphQL

PostgreSQL

MongoDB

Redis

Kafka

Elasticsearch

Docker

Terraform

CI/CD

Cybersecurity

Team Leadership

Agile Methodologies

EDUCATION

M.S. Computer Science

Stanford University

2013

B.S. Electrical Engineering

MIT

2011



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PROFESSIONAL SUMMARY

Innovative and results-driven Software Architect with over 15 years of experience in designing high-performance, scalable distributed systems. Proven track record of leading cross-functional teams to deliver mission-critical solutions in FinTech, Healthcare, and E-commerce sectors. Expertise in cloud-native architectures, microservices optimization, and enterprise security.

EXPERIENCE

Principal Software Architect

2023 - Present

Global FinTech Solutions

- Architected a next-generation real-time payment processing engine handling 10M+ transactions per second.
- Led the migration of legacy monolithic systems to a cloud-native microservices architecture on AWS EKS.
- Implemented Zero Trust security framework across the entire engineering organization, reducing vulnerability exposure by 95%.
- Mentored a team of 20+ senior engineers and defined technical roadmaps for critical infrastructure projects.
- Reduced infrastructure costs by 40% through intelligent auto-scaling policies and spot instance utilization.

Senior Staff Engineer

2020 - 2023

HealthTech Innovations

- Designed and built a HIPAA-compliant telemedicine platform serving 5 million patients globally.
- Optimized video streaming protocols (WebRTC) to ensure low-latency consultations even in low-bandwidth regions.
- Developed a federated learning machine learning pipeline for privacy-preserving medical diagnosis models.
- Established Engineering Excellence standards, introducing automated chaos engineering and performance testing gates.
- Spearheaded the adoption of Rust for performance-critical services, resulting in a 10x throughput improvement.

Lead Backend Engineer

2017 - 2020

E-Commerce Giants Inc.

- Scaled the inventory management system to support Black Friday traffic peaks of 500k requests/second.
- Designed a highly available distributed caching strategy using Redis Cluster and Memcached.
- Migrated the search backend from Solr to Elasticsearch, improving query relevance and reducing latency by 300ms.
- Created a developer platform team that built internal tooling to streamline onboarding and deployment velocity.
- Authored 5 patents related to distributed transaction consistency in eventual consistency models.

Senior Software Engineer

2015 - 2017

Social Connect App

- Built the real-time notification service utilizing Apache Kafka and WebSockets for 50M active users.
- Optimized graph database queries (Neo4j) for friend recommendation algorithms.
- Led the 'Lite' app initiative, reducing Android app size by 70% and improving emerging market adoption.
- Implemented GraphQL API gateway, allowing frontend teams to reduce over-fetching and improve mobile performance.
- Conducting technical interviews and contributed to growing the engineering team from 15 to 50 members.

Software Engineer II

2013 - 2015

Cloud Data Systems

- Developed RESTful APIs for a SaaS analytics platform used by Fortune 500 companies.
- Automated database backups and disaster recovery procedures using Python and Bash scripts.
- Integrated third-party payment gateways (Stripe, PayPal) and subscription management logic.
- Implemented role-based access control (RBAC) and OAuth2 authentication flows.
- Collaborated with product managers to define MVP requirements and delivery timelines.

Software Engineer

2011 - 2013

StartUp Hero

- Full-stack development for an early-stage ed-tech startup using Ruby on Rails and jQuery.
- Built the initial classroom video conferencing features using Flash Media Server.
- Managed AWS EC2 instances and successfully handled the viral growth phase.
- Created the first automated test suite (RSpec), reducing regression bugs by 60%.
- Participated in Y Combinator demo day preparation and technical due diligence.

Research Assistant

2010 - 2011

MIT Media Lab

- Collaborated on HCI research projects exploring tangible user interfaces.
- Developed prototypes using Arduino and Processing to visualize sensor data.
- Published a paper on 'Interactive Learning Environments' at CHI 2011.
- Assisted in teaching 'Introduction to Programming' to undergraduate students.

Engineering Intern

Summer 2010

SpaceX

- Contributed to the telemetry data visualization dashboard for Falcon 9 launches.
- Wrote C++ drivers for custom avionics hardware sensors.
- Participated in code reviews and learned high-reliability software practices.