

Alex Johnson

Senior Software Engineer | Cloud & Distributed Systems Specialist

Address: 42 Innovation Crescent, Silicon Valley, CA, USA 95014

Phone: +1 (555) 987-6543

Email: alex.johnson.dev@example.com

LinkedIn: <https://www.linkedin.com/in/alexjohnson-dev>

GitHub: <https://github.com/alexjohnson>

Dynamic, results-driven software engineer with 9+ years of progressive experience designing, building, and delivering large-scale distributed applications in cloud-native environments. Proven track record of leading cross-functional teams to ship secure, high-availability microservices, data pipelines, and DevOps automation that reduce costs, accelerate release cycles, and delight customers. Adept at translating ambiguous business needs into robust technical roadmaps, championing clean architecture, continuous improvement, and knowledge-sharing cultures. Passionate about open-source, mentorship, and crafting scalable systems that empower millions of users worldwide.

Core Technical Skills

- Programming Languages: Python, Java, Kotlin, Go, TypeScript, JavaScript, SQL, Bash, Rust
- Frameworks & Libraries: Spring Boot, FastAPI, Flask, Django, React, Next.js, Angular, gRPC
- Cloud & DevOps: AWS (EC2, ECS, EKS, Lambda, S3, RDS, DynamoDB, CloudFormation, IAM, CloudWatch), Azure, GCP, Docker, Kubernetes, Terraform, Ansible, GitHub Actions, Jenkins, ArgoCD
- Data Engineering: Kafka, RabbitMQ, Spark, Hadoop, Airflow, Redshift, BigQuery, Snowflake
- Databases: PostgreSQL, MySQL, MongoDB, Cassandra, Redis, Elasticsearch, Neo4j
- Testing & Quality: TDD, BDD, JUnit, pytest, Cypress, Selenium, Pact, SonarQube
- Methodologies: Agile (Scrum/Kanban), DevSecOps, CI/CD, Domain-Driven Design, Clean Architecture

Professional Experience

Staff Software Engineer – Payments Infrastructure – Stripe

July 2022 – Present

Lead architect for Stripe's next-generation global payment routing engine, processing 10K+ TPS across 195 countries with five-nines availability. Drove the migration from a monolithic Rails stack to event-driven microservices in Kotlin and Go atop Kubernetes on AWS; reduced p95 latency by 37 % and cut infrastructure spend \$1.8 M annually through right-sizing and intelligent autoscaling.

Steered a cross-functional squad of 12 engineers, SREs, and security specialists to embed DevSecOps best practices, establishing SCA, secrets scanning, and policy-as-code gates in GitHub Actions. Championed a canary release strategy leveraging Argo Rollouts and automated rollback, slashing mean time-to-recover from 40 min to 6 min.

Mentored five mid-level engineers to senior promotions; launched an internal 'Payments Systems' study-group, boosting org-wide domain fluency.

Senior Software Engineer – Observability Platform – Netflix

March 2019 – June 2022

Designed and delivered 'EagleEye', a multi-region telemetry ingestion and analytics pipeline (Kafka → Flink → ElasticSearch → Druid) that streams 6 PB/day of metrics and logs for 8 000+ microservices. Implemented adaptive sampling and schema evolution strategies that cut storage costs 42 % while retaining 99 % of incident-relevant data.

Pioneered Netflix's adoption of OpenTelemetry and o11y standards; authored company-wide tracing libraries in Java and Node.js embraced by 400+ repos, enabling full request lineage and 15 % faster RCA on SEV-1 incidents.

Collaborated with the Reliability Engineering group to introduce chaos engineering experiments driven by Gremlin integration, elevating system resilience scores from 86 % to 96 %.

Received Netflix 'Top Innovator' award 2021 for contributions to platform observability.

Software Engineer II – Confluence Cloud – Atlassian

January 2016 – February 2019

Owned backend services responsible for collaborative editing and inline comments, serving 50 M monthly active users. Refactored a legacy Java service into Spring Boot micro-components, introducing CQRS and event sourcing atop AWS Kinesis and DynamoDB. Reduced concurrency conflicts by 80 % and unlocked near-real-time collaboration.

Implemented fine-grained feature flags and A/B experiments using LaunchDarkly, giving product managers rapid iteration loops with statistically valid results in under a week.

Acted as Dev Environment Champion: containerised developer stacks with Docker-Compose, cutting onboarding time from 3 days to 2 hours.

Key liaison with Security team; remediated two critical CVEs within SLA.

Software Engineer (Full-Stack) – CodeCrafters Solutions

July 2013 – December 2015

Built bespoke web applications for 20+ SME clients across finance, healthcare, and logistics using Django/Flask and AngularJS. Spearheaded CI/CD pipelines on Jenkins and early Docker, shortening delivery cycles by 60 %.

Integrated third-party APIs (Stripe, Twilio, Salesforce) and implemented OAuth2-based single-sign-on.

Won 'Employee of the Year' 2014 for delivering three concurrent projects under budget and ahead of schedule.

Selected Projects

HyperDrive – High-Throughput Data Replicator (Open-Source Core Project)

Technologies: Go • gRPC • Apache Kafka • Raft • AWS CDK

Architected and implemented an open-source data replication layer capable of streaming 50 000 msgs/s across geo-distributed clusters with exactly-once semantics. Utilised Raft-based consensus for sharding metadata, engineered custom compression codecs, and provided a self-service Terraform module for one-click deployment. Featured on HackerNews front-page and adopted by three Fortune 500 companies.

Helios – Serverless Cost Optimiser (Personal Research)

Technologies: Python • AWS Lambda • Step Functions • DynamoDB • CloudWatch • Pandas

Developed an analytics engine that ingests AWS billing & CloudWatch data, predicts idle Lambda concurrency, and auto-tunes provisioned-concurrency settings via scheduled Step Functions. Demonstrated 22 % monthly cost savings in production workloads. Project showcased at AWS Community Summit 2021.

VisionTrail – Edge AI Wildlife Monitoring (Academic Collaboration)

Technologies: TensorFlow • OpenCV • NVIDIA Jetson • MQTT • React Native

Built an end-to-end wildlife conservation platform: Jetson-powered cameras run YOLOv5 for species detection, stream metadata via MQTT to a Flask backend, and visualise movement patterns on a React Native app. Deployed in two national parks; reduced ranger response time to poaching events by 47 %. Funded by the Global Conservation Fund.

MarketPulse – Real-Time Sentiment Dashboard (Client Contract)

Technologies: FastAPI • WebSockets • Redis Streams • Vue.js • D3.js

Engineered a trading sentiment platform that aggregates 1 M+ tweets/hour, runs BERT-based sentiment analysis, and streams insights to a Web-socket dashboard. Enabled hedge-fund analysts to identify leading indicators 30 min ahead of market movements.

SafePass – Contact-Tracing Platform (COVID-19) (Hackathon Winner)

Technologies: Kotlin • Spring Boot • PostgreSQL • Docker • Kubernetes • Prometheus

Led a four-person team to build a privacy-preserving BLE contact-tracing solution. Implemented cryptographic rolling identifiers and exposure risk scoring. Won first place at HackForGood 2020 and piloted with a regional health authority.

Project 6 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 7 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 8 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers

and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 9 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 10 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 11 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 12 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 13 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 14 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Project 15 – Innovation Sandbox Initiative

Technologies: React • Module Federation • GraphQL • Cypress • Lighthouse CI

Conceived and developed a proof-of-concept demonstrating advanced micro-frontends communicating over event buses, complete with automated accessibility testing, SSR hooks, and performance budgets enforced via Lighthouse CI. Integrated GraphQL federation layers and implemented robust observability with OpenTelemetry traces stitched across edge and core services.

Courses & Certifications

- AWS Certified Solutions Architect – Professional • Amazon Web Services • 2023
- Certified Kubernetes Administrator (CKA) • CNCF • 2022
- Google Professional Cloud Developer • Google Cloud • 2021
- Machine Learning Specialization • Coursera/Stanford • 2020
- Data Engineering on Google Cloud • Qwiklabs • 2020

- Advanced React and GraphQL • Wes Bos • 2019
- Terraform Associate • HashiCorp • 2019
- Certified ScrumMaster • Scrum Alliance • 2018
- Java Performance Tuning Workshop • Oracle University • 2017
- Building Event-Driven Architectures • AWS Training • 2017
- Deep Learning Nanodegree • Udacity • 2016
- Secure Coding Practices • SANS Institute • 2016
- Designing Microservices with DDD • Pluralsight • 2015
- Front-End Masters – Advanced JavaScript • 2015
- CI/CD Pipelines with Jenkins X • CloudBees • 2015

Achievements & Honors

- Stripe ‘Engineering Excellence’ Award – 2023 • Recognized for architecting the global payment routing engine achieving sub-50 ms latency.
- Top Innovator Award – Netflix Engineering • 2021
- HackForGood Global Winner • 2020 – SafePass Contact-Tracing Platform
- AWS Community Builder – Serverless Category • 2020-Present
- Open-Source Contributor of the Month – CNCF • July 2019 (contributions to Helm 3 release pipeline)
- Best Speaker – DevOps World Conference • 2018 (talk on Continuous Verification)
- Employee of the Year – CodeCrafters Solutions • 2014
- Google Summer of Code Mentor • 2017-2020
- First Prize – ACM ICPC Regional Hackathon • 2012
- Dean’s List – Computer Science, Stanford University • 2010-2012
- Winner – Kaggle ‘Cloud Cover Prediction’ Competition • 2015
- Certificate of Merit – IEEE Extreme Programming Contest • 2013
- Bronze Medal – HackerRank Week of Code 34 • 2016
- TechCrunch Disrupt Hackathon Finalist • 2015

- Toastmasters Competent Communicator Award • 2018

Education

Master of Science in Computer Science – Stanford University • 2012-2014

Bachelor of Engineering in Software Engineering – University of Waterloo • 2008-2012