

# Charles Guo



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## AREAS OF EXPERTISE

### Management & Leadership Skills

- Leader in championing AI solutions, expert in RAG and AI model fine-tuning and publishing a regular [newsletter](#) about AI
- Proven experience managing and mentoring technical teams of 12+ software and QA engineers
- Expertise in designing and deploying public and hybrid cloud platforms supporting millions of devices
- Strong hands-on coding skills in programming languages with Java, Go, and Python.
- Mastery of modern cloud platforms and technologies, with deep experience in AWS and GCP ecosystems.
- Skilled in addressing engineering challenges and ensuring scalable and robust solutions.
- Advanced knowledge in Reactive Streams programming and building event-driven architectures.
- Supportive leader fostering a culture of autonomy, collaboration, and trust
- Proven track record of mentoring and promoting team members, enhancing morale, and driving synergy within cross-functional teams.
- Extensive experience leading distributed teams across geographies and coordinating efforts across cross-functional departments.
- Strategic thinker with strong business acumen, balancing objectives, deliverables, and budgets effectively.

### Technical Skills

- **AI and Machine Learning:** Claude Code, Codex, Gemini, Cursor, PyTorch, Amazon Bedrock, fast.ai, fastapi, langchain, retrieval-augmented generation (RAG)
- **AI app:** Experts in LLM fine-tuning, building RAG applications, LLM integration with Google Apps
- **Cloud Platforms & Tools:** Kubernetes, Docker, AWS EKS, CloudFront, RDS, S3, EC2, WAF, Shield, CloudWatch, DynamoDB, Azure, GCP, Kafka, Istio
- **On-Premises Technologies:** MinIO, MicroK8s, VMWare ESXi, FedRAMP-compliant deployments
- **Networking Expertise:** SNMP, SD-WAN, TCP/IP, Linux, DSCP, Layer 2/3 Protocols, Nginx
- **Programming Languages & Frameworks:** Java, Go, Python, Perl, .NET, C#, Shell Scripting, JavaScript, TypeScript, Scala, XML/XSLT, Spring Boot, Node.js, Angular, React
- **Database & Storage:** PostgreSQL, MinIO, InfluxDB, MongoDB, SQL Server, Oracle
- **DevOps & CI/CD:** Spinnaker, Jenkins, Terraform, Gradle, Maven, GitHub Actions, New Relic, LaunchDarkly
- **Monitoring & Observability:** Humio, Grafana, Prometheus
- **Integration & APIs:** Swagger, REST, SOAP, gRPC, Informatica, Workato, DreamFactory, ActiveMQ
- **Big Data & Data Warehouse & Reporting:** ClickHouse, Snowflake, Splunk (Splunk® Certified)
- **Security & Vulnerability Management:** Coverity, Qualys, Burp Suite, Checkmarx, OWASP
- **Development Tools:** IntelliJ IDEA, Eclipse, Visual Studio Code
- **Domain Knowledge:** Networking industry (SNMP, SD-WAN, L2/L3 protocols), Health Industry

## PROFESSIONAL EXPERIENCE

### **Professional Summary**

Cloud Engineering Leader with 15+ years of experience in designing, developing, and managing scalable, secure cloud-native systems. Proven expertise in microservices, hybrid cloud deployments, and cross-functional leadership. Adept at driving innovative solutions and delivering measurable results in high-stakes environments.

### **Senior Engineering Manager**

Tebra, San Jose, CA

Jun 2025 – Present

Building AI powered Electronic Health Record (EHR) solutions, responsible for payments and insurance collections.

- Spearheaded the company's first AI initiative, developing a machine learning model using LLM fine-tuning to predict claim success rates, creating a potential new revenue stream and establishing the foundation for data-driven decision making.
- Accelerated legacy code modernization by pioneering the adoption of Anthropic's Claude Code for microservice migrations, reducing typical 2-week projects to 3 days and creating reusable prompt templates for company-wide deployment.
- Eliminated critical analytics bottleneck by architecting and implementing a next-generation reporting platform using ClickHouse, enabling real-time queries and scalable data analytics across the organization.
- Established a new team culture by focusing on quality and delivery timelines. Converted a regular team to a super team which sets the example for other engineering teams.
- Published a weekly [newsletter](#) on AI and getting tens of thousands of views

### **Cloud Engineering Manager**

HPE, San Jose, CA

Jun 2021 – May 2025

Building a public cloud platform (GreenLake) for all HPE products, including networking, storage and compute. Building cloud native microservice applications with multi-region support.

- Spearheaded the development of a multi-region public cloud platform supporting networking, storage, and compute products.
- Leveraging the cloud investment and deploy the same application to on-prem environment when customer has security requirements (government agency)
- Establishing a unified API framework which is agnostic to cloud or deployment type (cloud, on-prem), and it can be leveraged by internal teams as well as external customers.
- Experienced in designing and implementing microservices and examining the tradeoff of different cloud solutions
- Re-architected and migrated monolithic application to use microservices structure
- Improved security posture of the services by enforcing security standards, JWT token scope validation and application instance validation
- Designed and implemented cost optimization strategies, reducing cloud infrastructure expenses while maintaining high availability and performance.
- Lead the migration to ARM based CPU and cutdown the cost by 40%
- Practicing agile development strategy, including planning, scoping, standup meeting, product demos, retro meeting and burn down charts
- Built Humio and NewRelic dashboard to proactively monitor service health and APDEX score
- Building complex CI/CD pipeline with Spinnaker and Jenkins, Github Actions
- Implemented staggered deployment strategy for multi-region deployment
- Optimized QA automation framework using multi-container runtime and cut down the 80% automation runtime
- Worked on implementing Universal Device Identity Service using IDevID and LDevID
- Deployed on-prem solutions meeting FedRAMP requirements
- Worked on building the AI assistance tool using Amazon Bedrock

### **Engineering Manager, Network Performance Management**

LiveAction, Palo Alto, CA

Feb 2020 – May 2021

Leading overall product development for LiveAction's two product lines: LiveNX for network performance management and Cloud Monitoring.

- Applied in-depth knowledge of L2/L3 network protocols, network performance management, SD-WAN, and VeloCloud to enhance network efficiency and reliability
- Leading the implementation of the core network monitoring product, including technical design and implementation, QA, code review, build and release
- Extending the capability of the product to the cloud for AWS, Azure, and GCP. Created a new revenue stream for the company and great potential for growth.
- Developed machine learning algorithms for predictive analytics and network security, enhancing the product's analytical capabilities
- Designed and implemented the core framework for dashboards, alerts, and reports, improving user engagement and data accessibility
- Evaluated and implemented simple, consistent, and easy-to-use APIs using gRPC, REST API, and Actor Model, enhancing integration and user experience
- Worked with multiple database systems, including MongoDB, InfluxDB, and a proprietary database, to build SSO solutions supporting LDAP, Okta, TACACS+, and Radius, improving security and user management
- Architected and designed algorithms for monitoring audio and video performance of the network, enhancing media quality and user satisfaction

### **Director, Customer Experience Systems**

Arlo Technologies Inc. (Spin off from Netgear)

Jul 2018 – Nov 2019

### **Director/Manager, Applications**

Netgear Inc., San Jose, CA

May 2013 – Jun 2018

Responsible for customer experience systems across the company, including online web platform, e-Commerce platform, and customer support platform (Salesforce Service Cloud).

- Led integration track of Salesforce Commerce Cloud (Demandware) implementation (a 2 million dollars project). Built critical integrations with Salesforce Commerce Cloud, Order Management Systems, ERP System, Payment Processing System and third-party logistic vendors.
- Designed and implemented new Salesforce Service Cloud, which supports several critical business applications (online ticketing, chat, customer services, knowledge base, etc.).
- Designed physical and logical server architect on AWS for new corporate applications using AWS platforms, including EC2, S3, CloudFront, CloudWatch, RDS, WAF/Shield, etc.
- Implemented CI/CD using Jenkins, Subversion, GIT and task/issue tracking system (JIRA). Increased quality of the product and reduced Time to Market.

### **System Architect/Senior Software Engineer**

Fujitsu America, Inc., San Jose, CA

Jan 2007 – Apr 2013

Built Fujitsu's CMS system, which supports Fujitsu's online platform globally ( <https://www.fujitsu.com> ).

- Selected and implemented applicable hardware, software, platforms, publishing tools, and programming languages for Fujitsu's CMS system, enhancing system efficiency and reliability
- Architected content publishing framework, including integration with Content Delivery Network (Akamai), enabling high availability and fast response time for end users, enhancing user satisfaction
- Provided technical leadership to team members. Interviewed, trained and mentored new developers.