

# Renxu Hu

Engineering  
Leadership @  
Snowflake

---

Full-stack engineering leader focused on AI products. Builds and ships agentic features end-to-end across web, mobile, and backend with strong emphasis on platform rigor, evaluation/telemetry, and performance—delivering at scale at Snowflake, Tesla, Snap, and beyond.

San Mateo, CA  
(858) 699-6450  
renxuhu0423@gmail.com  
<https://www.linkedin.com/in/renxu-hu/>

---

## Skills

---

**AI Product & Platform Engineering:** Coding Agent / Reasoning Agent architecture · Model Context Protocol (MCP) integration · Tool and prompt orchestration · Context and memory management · Agent-to-agent communication · Evaluation pipelines · Fine-tuning workflows · Model quality scoring · Retrieval and grounding · LLM performance optimization

**Frontend / Web:** TypeScript · JavaScript · React · Redux · RTK/React Query · GraphQL · Next.js · Webpack / Rspack · Module Federation · Playwright · CSS / HTML

**Backend / Infrastructure:** Golang · Java · Node.js · gRPC · REST · PostgreSQL · Kubernetes · Docker · Microservices · Caching · Distributed tracing

**Mobile:** Swift · Objective-C · Kotlin · Java · Cross-platform UI (Composer, Djinni)

**Tooling & Dev Workflow:** Bazel · Jenkins · GitHub Actions · Storybook · Playwright · Jest · Mocha / Chai

**Data Analytics:** Snowflake · SQL · Python · Airflow · Looker · Grafana · Telemetry & performance dashboards

---

## Experience

---

### Snowflake / Engineering Leadership (IC Role)

2024 - PRESENT, Menlo Park, CA

- **AI Everywhere & Cortex Code:** Architected and launched Cortex Code, Snowflake's agentic AI development environment powering intelligent assistance across all Snowflake products—including SQL worksheets, Notebooks, Streamlit apps, dbt projects, and data workflows. Enabled developers to interact with the entire Snowflake environment through natural language for context-aware code generation, debugging, and workflow automation unified under the AI Everywhere initiative. Led cross-team orchestration across frontend, backend, and AI/ML groups to establish the foundation for all Copilot and agentic AI experiences within Snowflake.
- **Snowflake Intelligence Platform:** Designed and delivered Snowflake Intelligence, a reasoning agent platform connecting Cortex Analyst, Cortex Search, and custom tools to power natural language data exploration.
- **PE Next Frontend Leadership:** Defined and led PE Next—Snowflake's next-gen frontend platform—cutting UI latency by 50%, reducing bundle complexity, and enabling modular federation adoption.
- **ai.snowflake.com Launch:** Pioneered Snowflake's first standalone domain beyond app.snowflake.com, solving cross-domain SSO and security challenges, setting the blueprint for all future \*.snowflake.com applications.
- **Performance & Scalability:** Built and deployed a stress testing framework for Snowsight's AI workflows within 24 hours, validating concurrency and resilience for enterprise-scale workloads.
- **Leadership & Recognition:** Served as Tech Lead for multiple teams (Cost & Workload Optimization, MX, AI Everywhere). Recognized by Sridhar (CEO) as a "10x Engineer" and by Vik (VP Eng) for exceptional technical impact.

### Tesla / Engineering Manager, Staff Software Engineer

2023 - 2024, Fremont, CA

- Orchestrated the launch of a pioneering project to unify access to Tesla's Cell Manufacturing software services, **enhancing integration and management across the board**.
- Managed a multi-disciplinary engineering team, overseeing project lifecycles, defining roadmaps, and ensuring alignment with organizational goals.
- Directed engineering, architectural, and managerial efforts to advance the software project, setting benchmarks in performance and scalability during critical expansion stages.
- Cultivated a culture of innovation, driving agile development practices and mentoring a dynamic team in the deployment of complex software projects within aggressive timelines.
- Spearheaded recruitment efforts, emphasizing diversity and skill alignment, to enhance team capabilities and adaptability in a fast-paced manufacturing environment.
- Facilitated cross-functional collaboration, working closely with product managers, quality assurance teams, and upper management to align project outcomes with business objectives.
- Implemented continuous improvement processes, encouraging feedback loops and iterative development to refine software solutions and practices.
- Promoted professional development within the team, providing guidance and opportunities for skill enhancement and career progression.
- Utilized a robust stack comprising GraphQL, gRPC, Golang, React, and Kubernetes, **streamlining service delivery and operational efficiency**.
- Championed the development of Tesla's first high-speed battery cell manufacturing execution software system, reinforcing its scalability for an **8x growth** across three factories.

### Snap Inc. / Technical Lead

2019 - 2023, Palo Alto, CA

#### Technical Lead, AR Enterprise Services

2021 - 2023, Palo Alto, CA

- Orchestrated a client engineering team, aligning project coordination with the strategic analysis of user needs to determine the best product offerings and technical designs.
- Oversaw the professional growth and development of the engineering team, including hiring, mentoring, performance reviews, and fostering a culture of continuous improvement and innovation.
- Pioneered the AR Enterprise Solutions initiative, transforming an idea into a substantial business that generated **\$250M in revenue** through partnerships with companies like Puma and New Balance.
- Managed organization-wide engineering design and cross-functional efforts, facilitating the global launch of AR Try On features for Snapchat users and partners, contributing **\$20M in annual sponsored Ads revenue**.
- Directed comprehensive Ads Tracking and Measurement initiatives, enhancing deterministic attribution and user Ad tracking, which culminated in a **30% boost in Snapchat's revenue**.
- Administered budgeting and technical resource allocation, leading to a **reduction in headcount costs by \$1.5M** without compromising on product quality or delivery timelines.

#### Technical Lead, Memories

2019 - 2021, Palo Alto, CA

- Led the technical execution for Featured Stories in Snapchat Memories, increasing daily snap views by **100M** across **500M** unique users, with the Year-end story attracting **1B daily views**.
- Championed cross-platform technical stack refinements, streamlining feature implementation and significantly reducing operational costs.
- Advanced the modularization of the app's architecture, employing an internal dependency injection pattern that **improved application cold start speed by 70%**.

### Groupon / Software Engineer

2018, Palo Alto, CA

- Developed email, in-app, and push reminder notifications end-to-end which allowed high traffic (a million users per day) and improved user experience with an expected **\$4.75M annual revenue**.
- Redesigned the reminder notification payloads to a generic payload for **50+** reminder

notifications and reduced **20000+** lines of code.

#### Microelectronic Embedded Systems Laboratory / Researcher

2015-2018, San Diego, CA

- Created Genie, a web UI for a Smart Building IoT application.
- Designed backend services enabling user workflows and microelectronic system communication.
- Built REST APIs and frontend interfaces for ML algorithm integration, bridging web and embedded systems.

---

## Education

---

### University of California San Diego / B.S. in Computer Engineering

La Jolla, CA