Hannah Zhang

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EDUCATION

Rice University

Aug. 2022 – May 2026

Bachelor of Science in Computer Science, Minor in Business

GPA: 3.79/4.0; Houston, TX

• Coursework: Data Structures & Algorithms, Software Design, Concurrency, Artificial Intelligence, Computer Security, Distributed Systems, Data Science Models, Compilers, Linear Algebra, Probability & Statistics

Experience

Software Engineering Intern

May 2024 - Present

Pinterest San Francisco, CA

Ad Formats Team | Monetization Org | 2025

- Architected a modular creative overlay system, enabling advertisers to layer custom images on ad pins.
- Integrated local inventory signals into ad metadata, increasing high-quality clicks from in-market pinners.
- Refactored legacy Objective-C UI into SwiftUI modules, improving iOS consistency and reducing maintenance. Visual Search Team | Core Org | 2024
 - Launched iPadOS expansion of "Shop the Look" carousel, boosting engagement through increased conversions.
 - Built infinite-scroll landing page with category filters, merging shopping and organic for seamless discovery.

Technical Product Management Intern

Jun. 2023 - Sept. 2023

Emerson Collective

Palo Alto, CA

- Engineered an Airtable, Okta, Salesforce integration, reducing 30-min workflows to under 1 min for 300+ staff.
- Directed two **end-to-end product improvement cycles** for the Internal Directory and Event Calendar, drafting PRDs, orchestrating cross-functional teams, and refining UX through stakeholder interviews.

LEADERSHIP

Project Management Lead; Software Lead | RiceApps

Sept. 2022 - May 2025

- 2025: Partnered with UTHealth Houston to develop a mobile exercise app in **React Native**, enabling personalized remote care and clinical tracking for patients with inflammatory myopathies.
- 2024: Launched a React.js donor dashboard for United Way Houston, enhancing insights for 27K+ stakeholders.
- Led Agile meetings, scoped features, and coordinated delivery across design, engineering, and nonprofit clients.

Teaching Assistant | Rice University CS Department

Aug. 2024 - Dec. 2024

- Mentored 15+ students on Java and **SOLID design principles** during weekly office hours, resolving bugs and deepening conceptual understanding.
- Evaluated 100+ assignments with in-line code reviews, ensuring technical rigor and code clarity.

Projects

Game Engine & Editor | C#, React, TypeScript, CosmosDB, ASP.NET, SignalR, Azure Jan. 2025 - May 2025

- Developed CosmosDB database schema and React-based frontend for a text-based game engine and no-code editor for SLB, enabling creation of interactive employee training modules.
- Deployed to Azure Web Apps using a CI/CD pipeline with blue-green deployment.

Concurrent NoSQL Database | Go, RestAPIs/HTTP, WebSockets, NoSQL, Postman Aug. 2024 - Oct. 2024

• Built a thread-safe NoSQL database in Go, accessible via a REST API, utilizing skip lists, server-sent events (SSE), goroutines, and channels for efficient data handling and real-time updates.

Real-Time Messaging Client | TypeScript, Web APIs, JSON (AJV), HTML/CSS

Oct. 2024 – Dec. 2024

• Developed a Slack-style TypeScript web app with login/auth, markdown support, live post updates via SSE, JSON schema validation, and near perfect (or ∼100) Google Lighthouse accessibility score.

TECHNICAL SKILLS

Languages: Python, Java, Go, Objective-C, Swift, TypeScript, JavaScript, C/C++, SQL, HTML, CSS

Frameworks: React.js, Next.js, SwiftUI, React Native, Node.js, Bootstrap, Tailwind, SignalR

Developer Tools: Git, VS Code, Xcode, IntelliJ IDEA, Postman, Azure DevOps, Heroku, MongoDB, CosmosDB Architecture: Object Oriented Programming, Concurrent Program Design, Client-server, MVC, NoSQL Databases

Methodologies: Agile Scrum, CI/CD, A/B testing, Experiment Frameworks, Test-Driven Development