

Junheng Zheng

Developer and Designer focused on Frontend Systems, UX Design, and AI Tooling.

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EDUCATION

Rochester Institute of Technology – 3.7 GPA

Bachelor of Science in Web and Mobile Computing

Rochester, NY

Expected May 2027

EXPERIENCE

Tesla – Software Engineer Intern

Aug 2026 - Present

- Led the redesign and migration of a core internal application from **Django** to **React and TypeScript**, modernizing **30+ legacy views** and building **12+** primitives and components for Tesla's global design system to standardize UI development across internal applications serving **1,000+ weekly users**.
- Built agentic frontend infrastructure using design-system constraints, structured Markdown, custom linting, and automated testing to enforce UI consistency and coding standards across **100% of generated interfaces**.
- Modernized legacy frontend architecture by migrating data fetching to **TanStack Query** and implementing pagination and virtualization, reducing initial records loaded by **60%** and simultaneously rendered rows by **85%**.

IBM Research – Software Engineer Intern

May 2026 – Aug 2026

- Led the redesign and migration of the Apps@Research Data Acquisition Platform from **Vue to React**, delivering a more intuitive and user-centered experience to over **3000** Researchers across the organization.
- Designed and built an application-level design system by developing **11+** reusable React components on IBM's **Carbon Design System** primitives using **Figma, React, SCSS, JavaScript, Zustand** and **Jest**, supporting **9 pages** across **65+** responsive and state variations.
- Built and deployed data-driven workflows by integrating with **Go** backend services and **OpenShift Kubernetes**, leveraging Podman, Helm, NGINX, parallel AI agents, and **MCPs** to accelerate development and delivery.
- Reduced operational overhead by eliminating administrator involvement in workflows representing **15%** of support requests through self-service client features and a configuration management CMS.

Liberty Mutual Insurance – UI Engineer Intern (Design Systems)

May 2025 – Aug 2025

- Developer and designer on the Enterprise UI team building and scaling an internal **design system** using **React, TypeScript, and Storybook**, personally increasing the component library by **50%**.
- Conducted QA checks between the developed React components and Figma Library, increasing scalable, visual and functional consistency across both platforms by over **60%**.
- Led early research on AI and **Model Context Protocols (MCPs)** within Liberty's CFT enterprise UX team, analyzing UX implications and presenting findings to **20+** directors, designers, and developers.

D&D Motor Systems – Software Engineer Intern

Aug 2024 – Dec 2024

- Worked as a developer and designer resulting in a full client-side redesign that drove a **23%** lift in engaged sessions, **17%** more engaged views, and a **70%** SEO improvement, validated via Google Analytics.
- Developed with HTML, CSS, JavaScript, and PHP, utilizing **Figma** for wireframing and prototyping.
- Utilized surveys, analytics, and heatmaps throughout design iterations to produce an in-depth case study.

PROJECTS

Uncommon Hacks 2026 – Winner, Social Impact Track | LifeStory

devpost.com/lifestory

- Won Social Impact track out of **150+** participants; built a memory-care platform for Alzheimer's patients that lets families create a living album of photos and voice narrations, helping patients reconnect with familiar faces.
- Developed using **Next.js, React, Supabase, ElevenLabs, and Tailwind CSS**; designed full UI in Figma.

SKILLS

Languages: HTML, CSS, JavaScript, TypeScript, SQL, Python, Java

Frameworks and Technologies: React, Next.js, Flutter, Tailwind CSS, Vite, MongoDB, MySQL, Neo4j, Storybook

Design Skills: Wireframing, Prototyping, User Research, Usability Testing, Design Systems, Visual Design

Design Tools: Figma, Adobe Photoshop, Adobe Illustrator, Miro