Jake Wang

EDUCATION

University of Illinois Urbana-Champaign

Master of Computer Science

GPA: 3.94

18 May 2025

Relevant Courses: Software Engineering I, Topics in Software Engineering, Applied Machine Learning, Cloud Networking, Database Systems, Advanced Data Management, User-Centered Machine Learning, Cloud Computing Applications

University of Minnesota-Twin Cities Bachelor of Computer Engineering

GPA: 3.53 30 Dec 2020

Relevant Courses: Internet Programming, Comp Arch & Machine Org, Intro to OS, Intro to Intelligent Robotic Systems, Formal Lang & Autom, Animation & Planning in Games, Programming Graphics and Games

SKILLS

Programming Languages: JavaScript, TypeScript, Java, SQL, Python, C/C++, HTML, CSS, Bash, Fortran

Frameworks & Tools: React.js, Next.js, Node.js, Nest.js, React Native, Expo, Express.js, Spring, Vue.js, Redux, Jest, NoSQL, MySQL, PostgreSQL, MongoDB, Supabase, Git, Docker, GitHub, AWS, GCP, Vercel, BitBucket, GitLab, Heroku, Monorepo, VScode, IntelliJ, Jira, Favro

EXPERIENCE

University of Illinois Urbana-Champaign

Champaign, IL

Lead Graduate Course Assistant - Database Systems

May 2024 - Present

- Support 500+ students in Database Systems by answering database-related questions, providing guidance, and tracking their progress
- Design, test, and grade 100+ machine problems in SQL, MySQL, MongoDB, and Neo4j, ensuring alignment with course objectives and student learning outcomes
- Collaborate with teaching staff to refine course content and delivery, fostering an engaging and effective learning environment

Illinois Enactus - Jila

Champaign, IL

Tech Lead - Volunteer

Sep 2024 - Dec 2024

- Led the development of Jila, a multilingual, community-driven app serving 1,000+ Q'anjob'al users, using Next.js, React Native, and PostgreSQL, in collaboration with a cross-functional team
- Designed the core app architecture, optimizing database design, API integration, and scalability to streamline team-led feature development and seamless feature integration
- Mentored and delegated tasks to 5 junior developers, fostering their technical growth while ensuring alignment with project objectives and cross-functional collaboration

Foundry Co

Minneapolis, MN

Software Engineer

Jun 2021 - Aug 2023

- Collaborated with UX and engineering teams to plan and implement numerous in-demand features across 6 concurrent apps, employing technologies such as Next.js, Node.js, Nest.js, and React.js
- Engaged in development and maintenance for a high-traffic Java site serving over 50,000 users with Spring & Vue.js
- Reduced web page response times by over 10 seconds by refactoring a complex Express.js & MongoDB back-end to Nest.js & PostgreSQL, leveraging Prisma ORM for data management and Jest for unit testing
- Designed and built quality RESTful APIs for various applications and integrated APIs across multiple projects
- · Contributed to software design and conducted code reviews to improve code quality and maintainability

PROJECTS

Lil Networking: Networking Building and Management Multi-Platform App

May 2024 - Aug 2024

The app designed to help people form intentional networking habits that lead to professional relationships

- Developed a multi-platform Progressive Web App using Next.js and a native mobile app using Expo, featuring OAuth-based authentication via LinkedIn and Google for secure user login
- Designed intuitive user interfaces with TailwindCSS and Material-UI, enhancing navigation and interaction while integrating push notifications to keep users engaged
- Built a scalable backend with PostgreSQL and Prisma ORM, optimizing data management and retrieval for a seamless user experience