”Jake” Zhi Wang

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EDUCATION

University of Illinois Urbana-Champaign Expected Dec 2024
Master of Computer Science ***GPA: 4.0***
Relevant Courses: Cloud Networking, Cloud Computing Applications, Database Systems, Applied Machine Learning

University of Minnesota-Twin Cities Dec 2020
Bachelor of Computer Engineering
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

TECHNICAL 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, NoSQL, PostgreSQL, MongoDB, Supabase, Git, Docker, Github, Vercel, BitBucket, GitLab, AWS, Heroku, GCP, VScode, IntelliJ, Jira, Favro
Spoken Languages: English, Mandarin, & Shanghainese

WORK EXPERIENCE

University of Illinois Urbana-Champaign Champaign, IL
Graduate Course Assistant *May 2024 - Present*

- Assisted in teaching Database Systems, supporting students in their learning journey by answering database-related questions and monitoring their progress
- Designed, tested, and graded SQL, MySQL, MongoDB, and Neo4j machine problems to ensure alignment with course objectives and student learning outcomes
- Collaborated closely with teaching staff to enhance course content and delivery, contributing to a dynamic learning environment

Foundry Co Minneapolis, MN
Full Stack Software Engineer *Jun 2021 - Aug 2023*

- Engaged in full-stack web development and maintenance for a high-traffic site, serving over 50,000 users, utilizing Spring and Vue.js
- Collaborated across teams, including UX and engineering, to plan and implement numerous in-demand features across 6 apps, utilizing technologies like Next.js, Node.js, Nest.js, and React.js
- Teamed up with engineers to rapidly create a Slack app to providing an efficient solution for recording pool matches, leveraging Supabase serverless functions
- Improved page response times by over 10 seconds by refactoring a complex express.js and MongoDB back-end into Nest.js and Prisma
- Designed and built quality APIs for applications and consumed APIs in various projects
- Participated in software design, conducted code reviews, and provided constructive feedback to improve code quality and maintainability
- Coordinated with the team to define execution plans and efficiently managed tasks using Jira and Favro
- Professionally interacted with clients to grasp their needs and provide daily technical assistance

PROJECTS

Lil Networking May 2023 - Present
The app designed to help people form intentional networking habits that lead to professional relationships

- Designed and implemented a multi-platform Progressive Web App using Next.js and a native mobile app using Expo to help people form networking habits
- Created user-friendly interfaces using TailwindCSS and Material-UI to facilitate easy navigation and interaction
- Utilized OpenID Connect Sign-In through LinkedIn for secure user authentication and personalized configurations
- Leveraged Prisma ORM for seamless interaction with PostgreSQL, enabling efficient data management and retrieval
- Enabled Progressive Web App (PWA) capabilities for an enhanced user experience on all devices
- Set up push notifications using web-push to keep users engaged and informed about networking opportunities
- Deployed the application and added analytics on Vercel to better understand user preferences

PUBLICATIONS

Journal of Physics D: Applied Physics 2021
Numerical Simulations of Hydrogen Interstitial Diffusion and Ferroelectricity Degradation in Lead Titanate Films

Jeong Ho You, Lin Zhu, Cooper Gray, Zhi Wang and Changdong Yeo