"Jake" Zhi Wang

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EDUCATION

University of Illinois Urbana-Champaign   Expected May 2025
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   *GPA: 3.5*
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

WORK EXPERIENCE

Foundry Co   Minneapolis, MN
Full Stack 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
- Enhanced features and resolved bugs for a biking mobile app on the App Store, utilizing React Native & Expo for the front-end and NestJS & PostgreSQL for the back-end, integrating Google Maps for route calculations
- Implemented a client portal website within 2 weeks to improve communication and better monitor project progress between project managers and clients, using React.js & Node.js
- 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

- Designed and implemented a multi-platform Progressive Web App using Next.js and a native mobile app using Expo
- Created user-friendly interfaces using TailwindCSS and Material-UI to facilitate easy navigation and interaction
- Utilized OAuth login thru LinkedIn and Google for secure user authentication and personalized configurations
- Leveraged Prisma ORM for seamless interaction with PostgreSQL, enabling efficient data management and retrieval
- Set up push notifications using web-push to keep users engaged and informed about networking opportunities

ACADEMIC EXPERIENCE

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

- 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

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, Vue.js, Redux, Jest, NoSQL, MySQL, PostgreSQL, MongoDB, Supabase, Git, Docker, GitHub, AWS, GCP, Vercel, BitBucket, GitLab, Heroku, VScode, IntelliJ, Jira, Favro

PUBLICATIONS

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