

Junkai Man

Full Stack Engineer

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EDUCATION

Brown University

Master of Science in Computer Science

Providence, RI

08/2023 – 12/2024

Duke University / Duke Kunshan University

Bachelor of Science in Data Science

Durham, NC / Kunshan, China

08/2019 – 05/2023

EXPERIENCE

Microsoft

04/2024 – 08/2024

Software Engineer Intern

On-site

- Developed the **React** UI components for Copilot in Microsoft Forms, crafting the input panel with seamless file reference feature, loading animations, and streamlining the AI-assisted survey creation process.
- Implemented query caching in **Redux**, reducing loading time from 2000ms to near-instant for cached results.
- Engineered the functionality for users to select files from OneDrive, enhancing the integration with **GraphQL** and M365 services and providing seamless user experience across products.
- Resolved 20+ accessibility issues, improved keyboard experience, and ensured compliance with WCAG standards.

Brown University Library

09/2023 – 04/2024

Software Engineer Intern

Hybrid

- Revamped **Angular** components for Library Discovery System and integrated analytic tools for telemetry of user engagement. Optimized the website's indexing on search engines, resulting in a 20% increase in organic traffic.
- Led critical upgrade for a website from **PHP** v5 to v7, reducing security vulnerabilities by modernizing deprecated modules and rewriting **SQL** queries, thereby enhancing site performance and user security.

Microsoft

07/2022 – 10/2022

Support Engineer Intern

On-site

- Provided support for **Azure** Monitor services, troubleshooting complex customer issues and enhancing system reliability and client satisfaction.
- Co-developed a Teams Bot in **C#** and **TypeScript**, streamlining workflow automation and cutting manual task allocation by 40%, earning recognition at Microsoft Hackathon 2022.
- Engineered a BI dashboard to provide real-time insights into employee skill levels, optimizing resource management and reducing decision-making time by 30%.

China Unicom

06/2021 – 08/2021

Software Engineer Intern

On-site

- Maintained the ETL data pipelines in **Java** for China's third largest mobile provider to process **millions of users'** behavior metrics daily, improving the recommendation system's training data accuracy and feature extractions, which led to a 20% increase in user conversion rates and boosted product revenue by 15%.
- Optimized performance through multi-threading and caching techniques, significantly enhancing API throughput and reduced the user interaction response time **from 1200ms to 400ms**.

PROJECTS

Gallinula: All-in-one Campus Experience App

05/2020 – 05/2023

- Developed the Gallinula.com, a campus-life application with 400+ daily active users, leveraging Mastodon and **MongoDB**, while crafting a responsive front-end in **Next.js** and **Tailwind CSS** to ensure an optimal user experience
- Decoupled the monolithic architecture into **microservices**, enhancing system scalability and maintainability, and optimized the CI/CD process using **Kubernetes** and **ArgoCD**, reducing manual maintenance costs by 80% and increasing service uptime by 50%.
- Engaged nearly **50%** of Duke Kunshan University's student population as active users, storing over 18,000 posts and replies, indicating high platform relevance and user retention.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, HTML, CSS, Python, Java, C++, C#, C, Golang, SQL, NoSQL, PHP

Technologies: React, Redux, Node.js, Angular, Vue, GraphQL, Express, MongoDB, MySQL, Django, Docker, Spark, Redis

DevOps: Azure DevOps, Git, Kubernetes, ArgoCD, Postman, Hadoop, Flink

Paper publications: ACM Multimedia 2022, Applied Intelligence 2023, ChinaVis 2022