

Education

Case Western Reserve University

Master of Science in Computer Science

Sep. 2023 - Present

Cleveland, OH

Rensselaer Polytechnic Institute

Bachelor of Science in Information Technology & Web Science; Minor: Philosophy

Sep. 2016 – May 2021

Troy, NY

Professional Experience

China Railway Cloud Information Technology Co., Ltd.

Senior Full Stack Developer

Jun. 2021 - Aug. 2023

Beijing, China

- Spearheaded frontend architecture for an R&D platform, serving over 350 developers and 500,000 users. Developed and maintained a comprehensive component library.
- Led a team of 6 frontend developers, collaborating with 12 backend developers on a marketing management system, featuring project management, contract management, bidding management, and other 8 different functions.
- Developed a proprietary question-answering bot utilizing Large Language Models, tailored for internal data.

IBM

Software Engineer Intern

Sep. 2019 - Dec. 2019

Armonk, NY

- Engaged in the design and development of a Use Case Analysis report, UI/UX mock-up, and a detailed roadmap for IBM Watson's digital twin technology.
- Conducted comprehensive analysis on potential applications, market viability, and technical aspects, contributing to strategic insights for platform growth and industry impact.

Projects

IoT Platform | *Python, Kafka, MySQL, ClickHouse*

Apr. 2023

- Contributed to the design of the system architecture of an IoT platform, managing data flow from hardware to various displays including mobile, PC, and large screens.
- Developed Python algorithms for IoT data analytics and facilitated CRUD operations using FASTAPI.
- Implemented Kafka for efficient real-time data transfer between modules and used ClickHouse for data storage, with MySQL for results display, optimizing data handling processes.

Question Answering Bot | *LLM, PyTorch, React*

Jan. 2023

- Developed a Question Answering Bot using ChatGLM-6B, fine-tuned with LoRA using 200,000 lines of internal data.
- Engineered the frontend with React, ensuring compatibility and optimized performance for both mobile and PC platforms.

Marketing Management System | *Nginx, Docker, Kubernetes, Webpack*

Dec. 2021

- Implemented virtual scrolling to effectively manage the display of large data sets, significantly enhancing system stability and performance.
- Utilized Nginx for reverse proxy and load balancing, streamlining system deployment with Docker on Kubernetes.
- Achieved a 70% reduction in package size through Webpack and Nginx-based gzip compression, enhancing web performance.
- Developed a versatile multi-role access system with detailed permission controls, extending down to individual UI elements through custom directives.

R&D Platform | *JS/TS, Vue, micro-frontend, SonarQube*

Jun. 2021

- Contributed to the design of the system architecture, focusing on technology stacks and CI/CD processes.
- Deployed and enhanced a component library with Vue, TypeScript, and JavaScript, adding over 20 unique components.
- Implemented a micro-frontend architecture for efficient management of large-scale projects in a cloud environment.
- Integrated SonarQube into the development process, leading to a significant improvement in code quality and an increase in unit test coverage to 86%.

Technical Skills

Languages: JavaScript, TypeScript, HTML/CSS/Sass/Less, Python, GO, Java, C++, SQL

Database: MySQL, ClickHouse, MongoDB, PostgreSQL, Milvus, AWS

Technologies/Frameworks: Vue, React, PyTorch, TensorFlow, MLFlow, Kafka, Kubernetes, Docker, Hadoop, Git