Yongqin Zhao
Seattle, WA | (206) 677 6780 | yongqinzhao23@gmail.com | linkedin.com/in/yongqin-zhao/ | github.com/JornsenChao

Master of Science candidate from **University of Washington**. Seeking a **Software Engineer** role starting July 2025.

EDUCATION

University of Washington, M.S. Software & Design Technology, Seattle.   09/2023 - 06/2025

Algorithms, Object-Oriented Programming, Software Development, Database, Web Programming, Machine Leaning, Data Visualization.

SKILLS

Language: Java, Javascript, Python, SQL, HTML/CSS, React, Go, Shell, Kotlin.
Concept: RESTful APIs, Object-Oriented Programming, CI/CD, Github Action.
Framework & Tools: Spring Boot, PyTorch, AWS, Google Cloud, Azure, MySQL, Git, Docker, ElasticSearch, Firebase, Next.js.

PROFESSIONAL EXPERIENCE and LEADERSHIP

Software Engineer Intern, Radical AI, Remote/San Francisco, CA   07/2024 – 09/2024
- Led a team of 3 interns in developing a Next.js-based full-stack web application hosted on **Firebase**, enhancing user engagement by 30% with secure authentication and email verification workflows.
- Designed and implemented dynamic toast notifications using **Material UI** and **React-Toastify**, integrating with Firebase Auth to detect key state-changing attempts and trigger real-time customized messages.
- Streamlined a profile setup screen for the onboarding process, integrating real-time data validation and seamless navigation using **Next.js**, ensuring a smooth user journey.
- Optimized state management with **Redux** and custom **React hooks**, optimizing routing and state handling to improve application performance and reduce state-related issues.

Data Engineer Intern, CityDNA Technology, Beijing, CN   03/2023 – 08/2023
- Spearheaded the development and delivery of urban analytics products, enhancing consultation services for 5+ projects and tailored evaluation metrics to improve decision-making for socio-economic development plans.
- Engineered robust **data processing** pipelines using **Python** and Pandas, boosting analysis efficiency for large-scale spatiotemporal traffic dataset planning by 40%.
- Implemented project-specific data models and data sharding strategies, configuring web visualizations with **D3.js**.
- Optimized loading speed by 2x with advanced **SQL indexing** and refined data management practices for real-time analysis.

ARC Research Fellow, ZGF Architects, Seattle, WA   *09/2024 – 05/2025*
- Implementing **Retrieval-Augmented Generation (RAG)** using **LLM** APIs, **LangChain**, and a **vector database**, integrating internal databases and web resources, enhancing user experience via real-time designer queries and media interaction.

PROJECTS

Order@Door: online food ordering.
- Architected a **Spring Boot** full-stack web application with Controller-Service-Repository pattern, building frontend with **React** and **AntD**, delivering smooth food ordering experience including registration, menu search, ordering and checkout.
- Deployed **PostgreSQL** on **AWS RDS**, executing CRUD operations with **Spring Data JDBC** to enhance data handling.
- Developed **RESTful APIs** with Spring Controllers, securing **session-based authentication** with **Spring Security**.
- Advanced scalability and operational reliability by containerizing with **Docker** and migrating to **AWS App Runner**.

Album@Net: creative GEN-AI imagery social network.
- Developed a social network using **React** and **OpenAI's Dall-E 3** for creative post sharing, facilitating intuitive user navigation through React Router v4.
- Enhanced token-based authentication with **JWT** and search efficiency with **ElasticSearch**, cutting response times by 20%.
- Boosted scalability by deploying a Golang-based service on **Google Cloud (Google App Engine)**.

Spot@fy: Kotlin Streaming music app.
- Developed an app with Android **Jetpack**, utilizing **Hilt** for dependency management and Jetpack Navigation for app flow.
- Engineered a mock RESTful API with json-server and **Retrofit**, designed interface with Jetpack Compose follwing **MVVM** pattern, which improved app responsiveness.
- Implemented local caching with **Room Database** and integrated Google Exoplayer for consistent global music streaming.
- Streamlined UI design for feed, album, and favorites sections using Jetpack Compose, enhancing navigation and user experience, leading to a 15% improvement in user engagement.