

ZHAOZHAN HUANG

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EDUCATION

Boston University

MS, Computer Science (GPA: 3.7)

Sep 2023 – Jan 2025

Boston, MA

Sun Yat-sen University

BS, Information and Computing Science

Sep 2019 – June 2023

Guangdong, China

TECHNICAL SKILLS

Languages: C, C++, JavaScript, TypeScript, Python, Kotlin, Golang, HTML/CSS, SQL

Frameworks/Packages: React.js, Express.js, Next.js, Bulma, TailWind, NumPy, Pandas

Technologies/Developer Tools: Git/GitHub, MySQL, MongoDB, Azure, Docker, Linux/Bash Shell, Android Studio

PROJECTS EXPERIENCE

BU Spark! Bad Landlord | Next.js, TypeScript, PostgreSQL, Git

May 2024

- Directed an agile team of 4 to create a **Next.js** frontend, showcasing property violations in the Boston area through dynamic data visualization. Utilized Git and GitHub for efficient version control and collaboration.
- Implemented a responsive map using **Mapbox GL JS** to pinpoint landlord locations, enhancing user interaction and accessibility. Employed **Tailwind CSS** for designing a user-friendly interface, focusing on optimizing the user engagement through intuitive navigation

MapReduce System | Go, Shell

Jan 2024

- Engineered a simplified **MapReduce** framework leveraging mutexes, channels, and condition variables within **Goroutines** to ensure efficient parallel computation and robust fault tolerance.
- Architected and executed a fault-tolerant system for both Map and Reduce phases, incorporating a dynamic master-worker model for task reassignment in the event of node failures, thereby maximizing data processing efficiency and system scalability.

Reading List Web App | React, JavaScript, Express, MongoDB, Git

Oct 2023

- Developed a comprehensive full-stack application facilitating user authentication, goal setting, and progress tracking, integrating **React** and **Redux Toolkit** for front-end state management, with **Express** and **MongoDB Atlas** for scalable REST API backend services.
- Adopted **MVC** architecture to enhance development efficiency and code maintainability. Utilized **Bulma CSS** for crafting a responsive and engaging user interface, significantly improving user experience and satisfaction.
- Automated deployment and scaling through **CI/CD pipelines** to **Azure App Service**, employing **GitHub Actions** to ensure continuous availability and scalability.

Computer Graphics Course Project | Python, OpenGL

Sep 2023

- Integrating **pyopengl** into GUI created by **wxpython** to show carious geometric surfaces.
- Crafted custom shaders in **GLSL** to simulate advanced illumination models and visual effects, such as texture and normal mapping, elevating the realism and aesthetic quality of 3D environments.

OTHERS

- Microsoft Certified: Azure Fundamentals, Certification, 2023
- Personal Website: <https://zhzh258.github.io/about/>