

Josh Lin

647-891-5329 | jiexulin99@gmail.com | [linkedin.com/in/jiexulin](https://www.linkedin.com/in/jiexulin) | github.com/linj121

EDUCATION

McMaster University

Bachelor of Applied Science in Honours Computer Science

Hamilton, ON

September 2018 – April 2023

TECHNICAL SKILLS

Languages: JavaScript, CSS, HTML, Python, SQL, Shell

Web Technologies: TypeScript, ReactJS, NextJS, NodeJS, Express, Prisma, PostgreSQL, MongoDB, GraphQL

Devops: Jenkins, Nginx, Docker, K8S, AWS, GCP

AI/Data: Anaconda, Numpy, Panda, Pytorch, OpenCV

Tools: Git, Github, Jira, Excel

EXPERIENCE

Data Analyst Intern

Didi Global Inc.

June 2021 – January 2022

World Leading Tech Company

- Didi, a vehicle-for-hire company headquartered in Beijing with over 550 million users and tens of millions of drivers
- Successfully executed the design and implementation of a comprehensive, internal-use, data visualization dashboard. This web application, created for data analysts, was built employing ReactJS, JavaScript, HTML, and CSS, enabling users to interact and engage with data more effectively
- Worked closely with the backend team to construct a MySQL database, enhanced its performance by **80%**
- Conducted comprehensive unit and functional tests for the web application, achieving a test coverage rate of **90%**
- Collaborated on a comprehensive passenger retention analysis, discerning patterns between lost and retained users to diagnose user experience challenges, spearheaded a **6.5%** enhancement in overall user retention
- Contributed to the development and refinement of a DWM (Data Warehouse Middle) table, which streamlined passenger lifecycle analysis and minimized SQL query complexity, reducing data retrieval time by **83%**
- Implemented PySpark in conjunction with Hive Database to orchestrate daily data extraction and report generation processes. This automated solution expedited report sharing via a chat bot API, significantly amplifying work efficiency

Information Technology Support Specialist

Southwestern University

Sep. 2018 – Present

Georgetown, TX

- Communicate with managers to set up campus computers used on campus
- Assess and troubleshoot computer problems brought by students, faculty and staff
- Maintain upkeep of computers, classroom equipment, and 200 printers across campus

Artificial Intelligence Research Assistant

Southwestern University

May 2019 – July 2019

Georgetown, TX

- Explored methods to generate video game dungeons based off of *The Legend of Zelda*
- Developed a game in Java to test the generated dungeons
- Contributed 50K+ lines of code to an established codebase via Git
- Conducted a human subject study to determine which video game dungeon generation technique is enjoyable
- Wrote an 8-page paper and gave multiple presentations on-campus
- Presented virtually to the World Conference on Computational Intelligence

PROJECTS

xRangerRtms | TypeScript, React, MobX, Flask, Django, PostgreSQL, Git

January 2023 – April 2023

- Collaborated in a team of 4 using **Agile** methodologies to develop a **real-time** online monitoring and management system for robots, enabling the company to track all robot locations and statuses effectively and efficiently
- Conceived a user-friendly frontend interface using TypeScript and ReactJS, streamlining the monitoring of robot statuses, alerts, and notifications. Amplified UI aesthetics using Bootstrap-React, Font Awesome, and SCSS, and implemented MobX for application state management
- Orchestrated a model for maintaining robot data using the **MVC** pattern, retrieving real-time and historical data from the xRangerTelemetry backend **Restful API** asynchronously, and updated the model's view with MobX

- Devised a reference counting mechanism to intelligently start and stop updates for the robot model based on usage across different components. This strategy decreased network requests, reduced server load by **15%**, and ensured data consistency across all components

Superchat | *React.js, JavaScript, HTML/CSS, Firebase*

December 2022

- Accomplished a chat room interface that facilitates real-time message exchanges among users, including message sending, auto-scrolling to the latest message, and real-time updating of chat content
- Implemented user authentication with Google, using Firebase's authentication modules, to ensure secure sign-in functionality
- Leveraged **Google's Cloud Firestore** for real-time data handling and storage of chat messages
- Crafted a dynamic UI that adapts based on the user's authentication state, incorporating a user-friendly sign-in button and sign-out functionality