James Koh

kohji@rose-hulman.edu | (812) 223-0510 | https://github.com/rhit-kohji

---

Education

Bachelor of Science, Computer Science and Software Engineering (Double Major)   **May 2024**
Rose-Hulman Institute of Technology, Terre Haute, IN   **3.74/4.0 GPA**

Skills

Languages: Java, JavaScript, Python, SQL, CSS, HTML, Typescript, C#, C++, C
Libraries/Frameworks: ReactJS, LangChain, ASP.NET, Ruby on Rails, Bootstrap, Redis, Firebase
Tools: Git, Docker, Node.js, MongoDB, Neo4j, CouchDB, PostgreSQL, FastAPI, RabbitMQ

Experience

Rose-Hulman Ventures – Software Engineer Intern – Indiana   May – Aug 2023
- Developed features for financing web application used by counties across Indiana
- Implemented components in React and Typescript to enhance application functionality by ~20%
- Handled server-side operations with SQL Server database in C#
- Piloted database schema design for new employee hire system

Republic Polytechnic – Software Engineer Intern – Singapore   May – Aug 2022
- Developed a REST API using Jakarta EE and OneMap API for last-mile delivery planning
- Implemented security verification of API with JWT
- Streamlined work pipelines by ~20% through supporting company training in the development of automated web tasks

Projects

Capstone: Gwen's Cookbook   Aug 2023 – May 2024
- Gathered feature requirements and feedback from interactions with client
- Developed full-stack recipe application from scratch using React and Ruby on Rails
- Utilized PostgreSQL database to store recipe and user information
- Performed UI and backend testing to reduce bugs by ~30%
- Led client relations and organization of feature documentation

Personal Conversation Chatbot   Nov 2023 – Feb 2024
- Implemented a LLM chatbot that adopts colloquial language to converse in Singlish
- Utilized chaining, memory and document retrieval for dynamic interactions
- Achieved linguistic accuracy of ~80% on a qualitative scale
- Spearheaded use of LangChain and delegation of research efforts on LLM models

Online Scheduler Web Application   Aug 2021 – Sep 2021
- Designed UI from scratch using Figma to reduce development time by ~40%
- Created a calendar integrated with a to-do list feature using HTML, CSS, JavaScript, and Bootstrap Framework
- Applied RESTful APIs for different themes of the application to increase user engagement by ~10%
- Deployed Firebase and RoseFire authentication with Firestore for user login and data storage

Activities

Society of Asian Scientists & Engineers (SASE)
Secretary, Social & Cultural Chair   Aug 2021 – May 2024
- Managed database of 130 members and prepared club administrative items for weekly meetings
- Supervised 4 major cultural and diversity events and promoted social media platforms