## **James Koh**

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**Education** 

Bachelor of Science, Computer Science and Software Engineering (Double Major) Rose-Hulman Institute of Technology, Terre Haute, IN

May 2024 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 Institute of Technology – Post Bac Researcher – Indiana

July 2024 – Present

- Developed a Python video pipeline to analyze verbal and non-verbal features, utilizing scikit-learn regression models to predict authenticity scores
- Conducted in-depth literature reviews to enhance understanding and ensure contextual relevance when refining materials

Drophouse Gen AI – Software Engineer – Illinois

Oct - Dec 2024

- Designed and implemented a React guest login system, leveraging cookies for user access management
- Diagnosed and resolved critical software issues, improving system performance and reliability by 30%

Rose-Hulman Ventures – Software Engineer Intern – Indiana

May – Aug 2023

- Developed features for a finance web application used by counties across Indiana
- Implemented React and Typescript components, enhancing application functionality by 20%
- Managed server-side operations with C# and SQL Server, optimizing data handling
- Led database schema design for new employee hiring 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 API security verification with JWT authentication
- Optimized work pipelines by training company staff in automated web task development, improving efficiency by 20%

**Projects** 

Rikishi Restaurant Website

Jan - Mar 2025

- Designed and developed a responsive, SEO-optimized static website using Figma, HTML, CSS and **JavaScript**
- Integrated Google Analytics to track user behavior, leading to a 15% increase in engagement

Capstone: Gwen's Cookbook

Aug 2023 - May 2024

- Collected feature requirements and client feedback, creating mock-ups in Figma
- Developed a full-stack recipe application from scratch using React and Ruby on Rails
- Conducted UI and backend testing, reducing bugs by 30%
- Managed client relations and organized feature documentation

Personal Conversation Chatbot

Nov 2023 – Feb 2024

- Developed an LLM chatbot capable of conversing in Singlish with colloquial language
- Implemented LangChain's chaining, memory and document retrieval for dynamic interactions
- Achieved ~80% linguistic accuracy based on qualitative evaluation