

Gabriel Y. G. Yang | [Personal Website](#)

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EDUCATION

National University of Singapore – Bachelor of Computing, Computer Science, Year 4 Aug 2021 to Present

- Teaching Assistant. [VIP award recipient](#) for rapid prototyping software and delivery for EzCompostr.
- [Distributed Database](#) - Built pipelines and sharded schema on CitusDB handling large e-commerce data volume.
- Database Security - Implemented security policies and MAC-based access control on Oracle VPD and OLS for a healthcare application for clinics, increasing security and data privacy for stakeholders.

Stanford University – NOC Silicon Valley

Jan 2023 to Dec 2023

- Navigated open-ended projects in uncertain markets, sought and integrated feedback from over 200 users, refining the product continuously. Devised unique and out-of-the-box software prototypes to solve complex pain points. Committed extra effort to perfect product development and to grow professionally.

UC Berkeley – Student Research Assistant

Aug 2023 to Dec 2023

- Partnered with Professor M. Kubinec in Chemistry and D. Garcia in CS, integrating cross-disciplinary expertise. Responsible for the project's quality and success, generating personalized student instruction with LLMs.

TECHNICAL SKILLS

- Python, Java, C, OpenAPI, Langchain, Postman, Kubernetes, Golang, Ruby on Rails, Express, DynamoDB, React, PostgreSQL, Node, Docker, AWS, Elasticsearch, Kafka, Snowflake, Typescript, no-SQL, new-SQL, LLM
- **Hackathon wins:** [DevDay Hackathon \(2nd\)](#), [AWS Supabase Hacks \(3rd\)](#), [HackoMania \(Runner-up\)](#), [Genlab Hacks \(Runner-up\)](#), [Stanford Wildfire Hacks Poster \(Category\)](#), [SMU legal tech \(Category\)](#)

WORK EXPERIENCE

Workstream – Software Engineer (California)

Jan 2024 to Present

- Coded custom sort in Elasticsearch, streamlining search capabilities across the platform.
- Led script migrations for deletion and schema changes, ensuring integration with less than 0.1-second downtime.

Mercy Relief – Data Engineer and Project Manager (Singapore)

May 2024 to Aug 2024

- Created automated data scrapers for disaster monitoring, reducing manual data collection efforts by 70%. Implemented a LLM pipeline and an email client to summarize and distribute collected data in daily updates.
- Managed relationships with internal and external stakeholders. Securing buy-in with detailed consulting proposals, financial models and strategic plans that outlined scalable solutions for disaster response.

Workstream – Full Stack Engineer (California)

Jan 2023 to Dec 2023

- Implemented notification systems on Twilio to enhance user experience, increasing engagement by 20%.
- Directed API endpoint development for new features, collaborating with product managers, design and QA teams.
- Developed an identity microservice using AWS SQS and Kafka for data ingestion to centralize and consolidate accounts throughout the business. Published and developed a Ruby Gem microservice with custom data structures to store tasks for specific business use cases.
- Remediated 10 critical and 30 high priority vulnerabilities, improving security infrastructure. Implemented security measures to protect against generative AI prompt hacking in AI-driven products, enhancing user data protection.
- Leveraged Snowflake to process 6 Million rows of unstructured hiring data to retrieve 16 aggregate indicators. Built a predictive model for forecasting customer trends, increasing customer retention rates by 10%.

EzGreen – Co-Founder (Singapore)

Dec 2021 to Dec 2023

- Designed and engineered a mobile application on Firebase, Flutter and Dart with 300 users with real-time chat functionalities, media uploads and social networking.
- Hosted webinars and workshops building up 500 enthusiasts in total, increasing app engagement by 80%.

CO-CURRICULAR ACTIVITIES AND PROJECTS

Google Developer Student Club – Tech lead

Aug 2024 to Present

- Architecting and developing an event based university wide Progressive Web App on Nextjs and Expressjs. Building CI/CD pipelines for seamless developer experience and load balancing hundreds of users for the app.
- Mentored junior developers in best coding practices and efficient project management techniques. Implemented Agile methodologies, ensuring that all sprints are completed with features delivered without major issues.

Gebirah, Help-App for Humanitarian Aid – DevOps Engineer

July 2023 to Present

- Led migration of a Node full stack application from AWS to Alibaba Cloud leveraging ECS, Nginx, RDS, MongoDB to improve system performance and scalability while reducing costs of cloud services.

Aspire AI, Pocket AI Tutor – Co-founder

Sep 2023 to Sep 2024

- Headed development of a speech to speech LLM image processing web application for student instruction. Securing funding of \$10k by demonstration of the system to investors.