James **Sungarda**

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Education

The University of Hong Kong   *Hong Kong SAR*

BACHELOR OF ENGINEERING (COMPUTER SCIENCE)   *Sep. 2024 - Jun. 2028 (expected)*

- Recipient of HKU Undergraduate Entrance Scholarship for Outstanding Academic Talents.
- Full scholarship awarded to outstanding freshmen in recognition of their academic result obtained before their admissions.

Skills

Programming Languages	C++, Python, Javascript/Typescript, HTML/CSS, SQL, Bash, Lua, TeX
Frameworks	Next.js, React, Django
Languages	English, Putonghua, Cantonese, Indonesian

Experience

Tam Wing Fan Innovation Wing   *Hong Kong SAR*

RESEARCH ASSISTANT   *Jun. 2021 - Present*

- Trained BERT-based language models for text classification, enhancing contextual awareness by using domain specific pre-training.
- Architected and built a full-stack application with user management system with Next.js, MongoDB, and TailwindCSS to serve as the primary model interface.
- Deployed scalable RESTful API endpoints to deliver real-time model inferences between the backend LLM model, database, and the user-facing application.
- Research is supervised under Professor Kao, Benjamin C.M of The University of Hong Kong

PT. Moxcal Teknologi   *Jakarta, Indonesia*

SOFTWARE ENGINEER   *May 2024 - Aug. 2024*

- Developed a web (HTML, Bootstrap, and JavaScript) and WhatsApp based AI chatbot solution and user interface to automate customer support:
- Built a Natural Language Processing (NLP) framework to accurately classify user intent and extract key entities (NER) from user messages.
- Enabled the chatbot to communicate through both text and natural-sounding speech through voice recognition and text-to-speech.

Projects

Arang

TYPESCRIPT, NEXT.JS, POSTGRESQL, AZURE   *Oct. 2024*

- Arang is a **spaced repetition** algorithm flashcards app which combines traditional digital flashcards functionality with LLM models using **Retrieval Augmented Generation** (RAG) to intelligently generate flashcards questions and answers based on images, text, and videos.
- **Full-stack web application** written in TypeScript, using the **Next.js framework with PostgreSQL** as backend database. The app connects to Azure's OpenAI service as the LLM provider.

Timeblockr

TYPESCRIPT   *Jan. 2025 - Present*

- Smart AI assisted calendar which uses **RAG** to retrieve and read existing calendar lists e.g. Google Calendar, connects to **Google Maps and OpenWeather** to intelligently assign time slots.
- AI recommendations and schedule adjustments based on **real time data** such as traffic data and weather forecasts.
- LLM (hosted in Azure) used are given a custom prompt and **fine-tuned with datasets** to improve output consistency and accuracy.

Honors & Awards

2024	**Second Runner Up,** HKU CSAxDSA Sociathon 2024	*Hong Kong SAR*
2022	**Finalist,** National Olympiad in Informatics (National level)	*Indonesia*
2023	**Finalist,** National Schools Debating Championship	*Indonesia*

Extracurricular Activity

HKU English Debate Society   *The University of Hong Kong*

COMPETITIVE TEAM   *Sep. 2024 - Present*

- Participated in numerous English debating competitions, competing in various formats.
- Regularly hosted debate workshops and training sessions for new members, as well as mentoring junior debaters.