

Jun Wei Ng

+65 96824440 | e0957730@u.nus.edu | <https://awpbash.github.io> | github.com/awpbash

EDUCATION

National University of Singapore (NUS)

Master of Science, Business Analytics (MsBA))

Aug 25 – Aug 26

- GPA: 4.88 / 5.00

- NUS Engineering Scholars Programme

- Recipient of DSO-AISG Incentive Award

Bachelor of Engineering (Civil Engineering), Honours

Aug 22 – May 25

- GPA: 4.67 / 5.00 (Highest Distinction)

- Minors: Computer Science, Data Analytics; Specialisation: Digitalisation of Urban Infrastructure

- Dissertation: Reinforcement Learning for Taxi Rebalancing to reduce congestion.

- Dean's List AY23/24 Semester 1 (Top 5% of cohort)

WORK EXPERIENCE

Data Science Intern, GovTech

Jan 26 – May 26

- Developed multimodal AI systems integrating fine-tuned detection models and vision-language models (RF-DETR, Gemini 3, Qwen-TTS/STT, Sam3), implementing multimodal RAG pipelines, prompt engineering, and agentic vision to enable reliable cross-modal reasoning.
- Architected end-to-end cloud infrastructure using Docker, AWS, and GCP, deploying scalable GPU-backed inference services for Whole-of-Government (WOG) web applications and edge AI (DGX Spark) use cases.
- Contributed to *GovTech Multimodal Hub*, productionizing multimodal AI capabilities for operational deployment.

Data Scientist Intern, Tictag

Jun 25 – Aug 25

- Developed and deployed scalable deep learning models for computer vision, speech, and video analytics, delivering production-ready, customized AI solutions.
- Built and integrated modular ETL pipelines to fine-tune detection and pose estimation models for client-specific retail analytics, improving model adaptability and deployment efficiency.

Teaching Assistant, NUS Computing

Aug 24 – Dec 25

- Teaching assistant for CS2040, Data Structures & Algorithms in Java for AY24/25 & AY25/26
- Placed on honour roll of student tutors

Climate Models Analytics Intern, Defence Science and Technology Agency

May 24 – Aug 24

- Developed a Selenium and API-based data pipeline for automated real-time weather data retrieval and processing
- Enhanced rainfall intensity analysis in the Western Maritime Continent using SRGAN and RDN to improve resolution of satellite precipitation images

SOFTWARE PROJECTS

FitSensei – NUS Venture Initiation Programme

Ongoing | Python, Kotlin, Pose Estimation, ReactJS, Qwen

- Developed an AI-driven personal trainer app that provides feedback on weightlifting form using computer vision.
- Received funding of SGD 10,000 for future development and incubation at Block 71

CO-CURRICULAR ACTIVITIES

President, NUS Civil Engineering Club

Aug 23 – Aug 24

- Led, organized and managed events for over 400 Civil Engineering students in NUS such as CEE Day.
- Represented NUS in Asian Universities Alliance (AUA) Youth Forum 2024 in Hong Kong and was awarded Best Presenter on adoption of AI and technology to reduce food waste on campus.

AWARDS

- Engineering Innovation Challenge 2023 & 2025 - Merit Award - The Institution of Engineers, Singapore
- College of Design & Engineering Innovation & Research Award (High Achievement)
- NUS Outstanding Undergraduate Researcher Prize (Group)
- IAHR-Singapore Hydraulics Medal (Top in cohort for hydraulics related modules)

ADDITIONAL INFORMATION

- IT skills: Python, Java, R, PostgreSQL, JavaScript, HTML, CSS, PTV Vissim, MATLAB, Fusion360, GCP, AWS
- Languages: English (Written and Spoken, Native), Mandarin (Written and Spoken, Mother Tongue)