Yuriel Wang Jun Long Ryan

Email | Portfolio | LinkedIn | Github | +6597999098

Education

Singapore University of Technology and Design (SUTD)   Sep 2021 – Sep 2026
MEng (Research), Artificial Intelligence

- GPA: *-/-, Pending*
- AI Singapore Accelerated Masters Research Scholar (2024 - 2026)

BEng (Computer Science and Design) | Minor in Artificial Intelligence (AI)

- GPA: 4.70/5.0, Honours with Highest Distinction
- SUTD Undergraduate Merit Scholar (2021 - 2024)

Aalto University | Finland   Dec 2023 - May 2024
Selected for the KKH Global Exchange Award for overseas exchange.

Relevant Coursework: Deep Learning, Machine Learning, Computer Vision, Statistical NLP, Discrete Mathematics

Experience

LMM Research Assistant, Social AI Lab (SUTD)   June 2024 – Dec 2024

- Web scraped using **Selenium** and **Beautiful Soup** to collect more than 28,000 comics for analysis.
- Recruited and managed 8 participants to evaluate 2,800 comics using **Label Studio** to assess large multimodal models' (LMMs such as **Qwen2-VL**, **LLaVa-OV**, **GPT4o** and **Gemini**) ability to comprehend humor.

LLM Research Intern, DSO National Laboratories   Aug 2023 – Dec 2023

- Applied the **Graph of Thoughts** reasoning workflow with LLMs to detect vulnerable code within a 3-layer call stack, reducing incurred API (ChatGPT) costs by 25%.
- Integrated Llama 2 and Code Llama with **LangChain** to perform Retrieval-Augmented Generation (RAG), further improving contextual understanding.

Founding AI Engineer, Check (Iterative W25)   Jan 2025 – Mar 2025

- Built a Retrieval Augmented Generation (RAG) workflow to produce syllabus accurate outputs, **securing a Pre-Seed fund** from Iterative VC (Winter 2025).
- Built a data processing pipeline by combining open-source Computer Vision models with LLMs, contributing 8,700 high quality questions to **Supabase** for RAG.
- Deployed **DeepSeek R1 models** to **Google Cloud Run** to solve Singapore GCE A-Level math problems, increasing the accuracy of the final outputs by 36%.

Projects

D'Noise (Capstone Project)   [GitHub Repository], 2025

- Implemented Google's Guided Speech Enhancement Network in **PyTorch** to enhance speech, leading to a 87.2% gain in SNR over non deep learning methods with real-time inference at 20ms latency.
- Initiated a data collection effort to record 20 hours of beamformed audio with IMDA's local English to facilitate model training on **Google Cloud Platform's Compute Engine** and **Cloud Storage**.

No Pain, Just Gain (50.035 Computer Vision)   [GitHub Repository], 2024

- Implemented Google's BlazePose model in **TensorFlow**, introducing Convolutional Block Attention Modules (CBAM) and architectural changes to achieve real-time inference (100ms) for human pose estimation.

Additional Information

Technical Skills: Python, PyTorch, TensorFlow, Google Cloud Platform, SQL, Java
Awards: SUTD Honours List | Jyoti and Aditya Mathur Student Achievement Award | Google Professional ML Engineer Certification
Community Involvement: Access Singapore Volunteer (Programs and Operations) | CAT-IG Vice President | SUTD Climbers Secretary | Freshman Orientation Welfare Executive | Teaching Assistant for SUTD Freshmore Math and Computing courses.
Languages: Native English (spoken and written) | Conversational Mandarin (spoken)