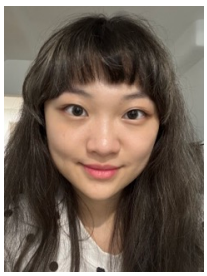

Julia Goh | juliagsy@gmail.com | Homepage: Julia Goh | LinkedIn: Julia Goh | Referrals: Petronas, Unify, UCL | GitHub: juliagsy | Hugging Face: juliagsy

Experienced Machine Learning (ML) Engineer (Data Science, Generative AI and Software/Full-Stack). MEng Computer Science graduate at University College London. Fluent in English, Chinese and Malay. Open to roles in ML/AI Engineering and Data Science. Acquired Microsoft certifications of AI-900, AI-102 and DP-900.

Education

University College London (UCL) | MEng Computer Science | September '20 – June '24

- **Grade**: First Class Honours
- Football Match Prediction: Regression, Classification, Tree and Forest, and SVM with **Python**.
- MARL in Portfolio Management: Explored the effect of different RL algorithms in competitive vs. cooperative MARL settings with **Python** and **OpenAI Gym**.
- Network Analysis of Programming Languages: Applied PageRank and HITS for analysing key driver in the evolution network, and community structure with modularity with **Python** and **NumPy**.

Experiences

Petronas | Machine Learning Engineer (Intermediate) | September '24 – Present

- End-to-end model development and deployment, such as data analysis, model training, hyperparameters tuning, model selection and cloud deployment on Azure.
- Worked with linear models, trees, random forest, XG boost and light gradient boosting machine (LGBM).
- PrAnCorr: *ML.* Built pipeline external corrosion depth & length prediction models of >90% accuracy.
- PrAnSpan: *ML.* Built subsea pipeline height & length prediction models of >70% accuracy.
- HIP: *Computer Vision.* Worked on working person detection through object detection with YOLO, pose estimation and vLLM with GPT4o. Involved prompt engineering for better inference performance.
- **Tech Stack**: **Python, MLFlow, Docker, SQL, Azure, SonarCloud, DevOps, Git**

Unify | Machine Learning Engineer | June '22 – February '24

- Ivy ML Models: *Applied Lead*. Led the team to expand ML model collection from scratch to 15+ within 4 months, including computer vision and NLP base models for business showcase.
- Ivy Transpiler: Introduced the native compilation feature for optimising performance of ML models.
- Model Hub: *Full stack*. Responsible in building client applications and API key authentication.
- Console Application: *Cloud*. Involved in v0 development and API gateway authorisation.
- Ivy: *Software Engineering*. Unified PyTorch, Tensorflow, JAX and NumPy functions, making them easily accessible through a single library. All codes are also readily compatible with the native libraries.
- **Tech Stack**: **Python, C++, CUDA, AMD RocM, Node.js, React.js, Next.js, TypeScript, Docker, GCP**

Infosys | Systems Engineer Intern | October '21 – April '22

- QnA Chatbot for Clinical Tabular Data: *ML systems engineering. Full stack development*.
- Developed TAPAS RESTful endpoints with database and interface for lab report analysis.
- **Tech Stack: Python, TAPAS, Rasa NLU/NLP, Django, React.js, HTML, CSS, Git, Transformers**

Research

UCL | Generative AI in Music | September '23 – April '24

- Review. Studied existing tech related to image and music generations, majority being text-conditioned.
- Paper. Developed POCs for Diffusion based Music-conditioned Image Generative AI and Transformer based Image-conditioned Music Generative AI.
- **Tech Stack: Python, Pillow, NumPy, SciPy, PyTorch, Transformers, Diffusers, Matplotlib, Git**