

Goh Kian Hwee Justin

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

Aug 2022 - May 2026

Bachelor of Science in Business Analytics

- Double Specialisation in Machine Learning Analytics and Financial Analytics, Minor in Quantitative Finance
- GPA: 4.81 / 5.0
- Computer Science Student Exchange Program at University of British Columbia, Vancouver Canada

RAFFLES INSTITUTION

Jan 2014 - Dec 2019

- 4 H2 Distinctions (AAA/A) at GCSE A Levels, Vice-Captain of Raffles Squash
- Received Raffles Academic Excellence Award 2018

TECHNICAL SKILLS

- Programming Languages: Python, Java, Javascript, HTML, SQL, R
- Software: Tableau, Microsoft SQL, R, UiPath, Jupyter, Anaconda, NoSQL, MongoDB, PostgreSQL, AWS, Google Cloud, Oracle
- Packages & Frameworks: Pytorch, Tensorflow, Pandas, Numpy, Scikit-Learn, Flask, ReactJs, Vue.js, Vite
- Concepts: Deep Learning, Machine Learning, Data Visualisation and Analytics, RPA, Software Development, Data Science
- Development Frameworks: AGILE, SCRUM, Waterfall

EXPERIENCE

TIKTOK *Machine Learning Engineer*

Jul 2025 - Dec 2025

- Incoming machine learning engineer for TikTok E-commerce platform

VISENZE *Machine Learning Research Engineer*

Jan 2025 - Jul 2025

- Conducted research and experimentation to improve dense and sparse transformer-based embeddings for ViSenze's multi-modal search system
- Engineered and scaled large-scale hard negative mining workflows, culminating in an end-to-end continual improvement training pipeline for Visenze's sparse and dense models
- Conducted comprehensive analysis of search regressions, focusing on embedding drift detection and resolution using advanced diagnostic tools, alongside rigorous evaluation of retrieval effectiveness via mAP/NDGC metrics and offline re-ranking pipelines
- Leveraged and integrated LLM into research pipeline for structured annotation and generation, building an efficient MLOps codebase for future research purposes
- Fine-tuned and deployed feature set release for synonym improvement for fashion search products

DELOITTE & TOUCHE *Financial Forensic Data Analyst*

May 2024 - Aug 2024

- Developed an ML classification pipeline by integrating both unsupervised and supervised learning methods, enabling the identification and segmentation of high-risk and fraudulent customers and transactions, achieving a 30% reduction in false positives
- Conducted in-depth research on deep learning techniques and their integration into fraud detection, exploring the potential for enhanced anomaly detection and pattern recognition
- Utilised SQL to query and manage transactional data in Relational Databases

LAND TRANSPORT AUTHORITY SINGAPORE *Financial Software Engineer*

Jun 2023 - Jan 2024

- Developed Python and UiPath bots to automate inefficient and manual financial processes
- Gathered requirements from 6 relevant stakeholders and engaged in Software Development Life Cycle using SCRUM
- Streamlined these workflows which resulted in 65% reduction in time spent on manual tasks, saving 21 man-days of work per year
- Conducted multiple User Acceptance Testing Cycles, that led to a reduction of 6 exceptions

PRICEWATERHOUSECOOPERS *Assurance Intern*

Jan 2022 - Apr 2022

- Developed Python scripts to accelerate drawn out manual workflows, leading to a 40% reduction in time spent

KEY PROJECTS

Fake News Classification, Developer

Natural Language Processing, Machine Learning, Deep Learning

- Classical Methods: Random Forest, N-grams, TF-IDF, Naïve Bayes, Support Vector Machines
- Deep Learning: Deep Neural Networks, Convolutional Neural Networks, Long Short Term Memory Networks

Part-of-Speech Tagging, Developer

Hidden Markov Models, Algorithm Development

- Implemented a Twitter POS tagging system integrating Hidden Markov Models, Viterbi Algorithm, and Naïve Bayes classifiers
- Engineered intricate feature extraction pipeline, encompassing morphological attributes, linguistic nuances and domain-specific insights intrinsic to Twitter communication, enriching the modelling processes with enhanced contextual understanding

Automated Machine Learning Platform, Software Engineer

CO-CURRICULA AND VOLUNTEER EXPERIENCE

SQUASH, Captain

Jan 2016 - Dec 2019

- Led high school Squash team to 2 National School Games Champions, and a runner up finish