# **Edbert Widjaja**

+852 9324 2257 | edbertwid88@gmail.com | GitHub | LinkedIn | Website

#### **EDUCATION**

## The University of Hong Kong

Bachelor of Engineering in Data Science, Minor in Finance

Sep 2023 – Jul 2027

**GPA:** 3.77/4.3

Awards: HKU Belt and Road Scholarship, Alibaba Intl. Hackathon 2024 Semi-Finalist, GenAl Hackathon for SDGs 2024 Finalist

## **WORK EXPERIENCE**

Langya Al Limited

Hong Kong

Cloud/Software Engineer Intern

Jun 2025 - Present

- Designed and exposed 30+ protected multimodal LLM, OCR API endpoints using Node.js, Express.js and Cloud Firestore Database
- Deployed endpoints on E2 Virtual Machines (VMs) with NGINX on GCP Compute Engine and serverless architectures (Firebase and Cloud Run), integrated to a JavaScript frontend via Cloud Firestore and REST
- Utilize AWS SigV4 token signing on Google Cloud Storage (GCS) Private Buckets through Cloud CDN and HTTPS Load Balancers
  for serving of 5+ static assets, leading to 65.7% faster load times and enhanced asset security
- Created full-stack solutions to automate LLM file retrievals & uploads with Google OAuth 2.0 Flow, reducing manual load by 40%
   Naxon.ai

LLM Engineer Intern

May 2025 – Jun 2025

- Applied multi-agent networks for an Adaptive RAG chatbot with G-Sheets Model Context Protocol (MCP) server integration, assembled through LangGraph, Azure OpenAI and PostgreSQL for memory handling, automating 85% of spreadsheet workflows
- Designed a multi-agent RAG system that enhances its replies through automatic changes in system prompt and knowledge base

Migrasia

Hong Kong

Data Scientist Intern

- Feb 2025 Apr 2025
- Built 8 domain-adapted Neural Machine Translation (NMT) system by fine-tuning Gemma2 SEA-LION 9B, optimizing LLM operations by over 80% with quantized LoRA and lifting average BLEU score by 24.4, outperforming OpenAl's GPT-40 by 200%
- Integrated dynamic analytics dashboard from PowerBI, React.js and Chart.js to company website, boosting web traffic by 30%
- Devised a full-stack AI grant writer with RAG, HTML/CSS/JavaScript, Django REST Framework, raising internal efficiency by 75%

## **Chinotech International Limited**

Hong Kong

Data Scientist Intern

- Jan 2025 Jan 2025
- Ran large-scale data migration to Thingsboard via **ShellScript**, HTTP **REST API**, **MQTT**, enabling **55%** more anomalies detected
- Developed and deployed ML-based predictive analytics solutions with AWS EC2, Docker, PostgreSQL and Trendz Analytics

### **PROJECTS**

# **STOCK NAVIGATOR** | Source Code

React | Django | TensorFlow | PyTorch | LangChain | PostgreSQL

- Full stack containerized app to display real-time data on 60+ stocks through dynamic Plotly charts with GitHub Actions for CI/CD
- Features include user authentication with PostgreSQL and JWT, 30-day price forecast and real-time market sentiment analysis
  with multiple stacked LSTM networks and a fine-tuned FLAN T5 + RAG chatbot to handle user queries

## **Grade Your IELTS!** | <u>Source Code</u>

<u>TensorFlow | PyTorch | Streamlit | Scikit-Learn | Transformers</u>

 Evaluated various ML/DL/NLP architectures—including TF-IDF-based regression models, custom neural networks integrated with BERT layers, and fine-tuned BERT variants—to optimize automated IELTS essay scoring

## SignBOT – Inclusivity for the Deaf | Source Code

<u>TensorFlow | PyTorch | LabelImg | OpenCV | Unsloth | Pandas</u>

Developed multiple features for an all-inclusive solution, including sign-to-text by fine-tuning SSD MobNet-v2 with TensorFlow
 Object Detection API) and personalized chatbot by fine-tuning Unsloth Llama-3.1 8B on QA dataset

## TEXT-2-IMAGE | Source Code

MongoDB | Express.js | React | Node.js | Tailwind CSS

Engineered a MERN full-stack app which translates text to images and handles authentication with BCrypt, JWT and MongoDB

## **SKILLS AND OTHERS**

- Technical: Python, C/C++, R, SQL, HTML, CSS, JavaScript, Git, Microsoft Excel, PowerBI, Google Cloud Platform, Firebase
- Frameworks: PyTorch, TensorFlow, Scikit-Learn, Pandas, LangChain, FastAPI, Django, PostgreSQL, React.js, Node.js, Express.js
- Coursework: Data Science, Data Structures, Probability & Statistics, Machine & Statistical Learning, Database Systems
- Others: HKU Data Science Association Executive Committee Member, Shun Hing College Event Management Team