Felix Lau Pangestu

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EDUCATION

Hong Kong Baptist University **Sep 2022 - Jun 2026**

Bachelor of Science (Hons) in Business Computing & Data Analytics | First Class Honors **Cumulative GPA: 3.6/4.0**

- Student Representative of the Senate (Science Faculty), Student Ambassador, Cultural Ambassador, Peer Mentor, Course Tutor
- Mr. and Mrs. Lee Siu Lun First-Gen University Student Scholarship, Outstanding Student Scholarship, HK Reaching Out Award

Nanyang Technological University | Fall Semester Exchange (Aug 2024 – Dec 2024), Fung Scholarship

RELEVANT EXPERIENCE

Digital & IT Intern | **Cathay Pacific** **Jul 2025 – Aug 2025**

- Built full-stack cargo compliance MVP using React/Flask, demonstrating automation potential for 40K+ monthly packets, identifying HKD 10M+ risk mitigation opportunity
- Developed data processing prototype with optimized database performance, achieving 10-20x speed improvements in testing, showcasing potential for 20K+ annual hour savings
- Assisted with API standardization projects across 6 cross-functional teams and partners including a global investment bank, leading ride-sharing company, and multinational oil corporation.
- Developed sequence/flow diagrams and endpoint specifications adopted by 6 microservices, reducing integration complexity.
- Implemented automated rostering algorithm for multi-team on-call scheduling; decreased scheduling conflicts by 60% and reduced manual assignment overhead by 80% across 3 engineering teams.
- Managed hackathon logistics for 600+ participants, coordinating stakeholders and maintaining project documentation.

Software Engineer Intern | **Wizpresso** **Jun 2024 - Aug 2024**

- Refactored core services from SvelteKit/Prisma to ASP.NET Core Web API, reducing API latency by 22% (1.6s→1.24s) through async I/O, DbContext tuning, and in-memory caching; delivered improvements to 1,500+ daily users.
- Implemented OAuth 2.0/OIDC with JWT SSO for 15k+ users; enforced secure standards (PKCE, key rotation), passing external security audits with no critical findings.
- Led zero-downtime migration from SQL Server to Amazon RDS using AWS DMS with CDC; ensured <0.05% data variance and automated reconciliation before switchover.

Research Assistant | **Hong Kong Baptist University** **Jan 2024 – Aug 2024**

- Adapted a 7B LLM for financial sentiment and NER using PEFT–LoRA (4-bit QLoRA); achieved higher F1 scores than BERT with >95% fewer trainable parameters and 60–70% lower compute use.
- Integrated fine-tuned LLM into LangChain pipeline for large-scale analysis of 20,000+ earnings call transcripts.

Software Engineer Intern | **Admazes** **Dec 2023 - Jan 2024**

- Built a RAG pipeline for a local LLM using LangChain and HuggingFace embeddings; improved QA accuracy by 25% on an internal test set and reduced hallucinations by ~60% via better retrieval and citation checks.

SELECTED PROJECTS

Real-Time Fraud Detection System | Python (Flask/scikit-learn/pandas), Apache Kafka/Zookeeper, Redis, PostgreSQL, Docker | **GitHub**

- Architected real-time fraud detection system achieving ~90% prediction accuracy on imbalanced datasets by implementing ensemble ML models (Isolation Forest + Logistic Regression) with automated anomaly detection capabilities
- Built distributed streaming architecture supporting 1,000-4,000 requests/second throughput for scalable transaction analysis

E-Commerce Website| MongoDB, Express, React, Node, Stripe | **GitHub**

- Architected full-stack MERN ecommerce with Stripe integration, JWT authentication, and live deployment
- Developed React frontend with real-time cart persistence, secure checkout flow, and full-featured admin order management

EXTRACURRICULARS

Founder | Read the Vision **Nov 2024 - Present**

- Building a computer vision solution to transcribe hand signals and improve communication between deaf/mute communities and the public; admitted to the HKSTP Ideation Programme (up to HKD 100,000 funding; initial HKD 10,000 secured).

Student Ambassador | Amazon Web Services **Jan 2025 - Present**

- Liaison between AWS and the student community, organizing events and promoting AWS resources to increase engagement.
- Supported the successful execution of AWS Summit 2025 by assisting with event logistics and partner coordination.

Participation & Awards

3rd Runner-up, HK Techathon+ 2025 | Top 8, Code to Give by Morgan Stanley@ SG 2024 | 2nd Runner-up, USFHK Rugby 2024

TECHNICAL SKILLS

Languages & Frameworks: Java, Python, C#, JavaScript, TypeScript, SQL, HTML, CSS, React, Svelte, Next.js, ASP.NET Core, Spring Boot, Express.js, Flask, Material UI, Tailwind CSS, Streamlit
Data & Analytics: PostgreSQL, MySQL, MongoDB, BigQuery, Firebase, AWS RDS, Pandas, Matplotlib, Seaborn, LangChain, Power BI, Tableau
Cloud & Development Tools: AWS (RDS, DMS, S3), GCP (BigQuery), Postman, Docker, Apache Kafka, Redis, Unity, Jira

INTERESTS

Powerlifting (1058lbs Total), Rugby (Varsity Team), Poker, R&B Music, *Remembrance of Earth's Past* by Liu Cixin