

MICHAEL BLANCHETTE

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EDUCATION

New York University

Master of Science in Computer Science | GPA: 3.78/4.00

New York, NY
Sep 2025 – May 2027 (Expected)

The Hong Kong University of Science and Technology

Bachelor of Engineering in Computer Science
Bachelor of Business Administration in Marketing

Hong Kong
Sep 2020 – May 2025

CFA Institute

CFA Exam Level II Candidate

Exam Date: Nov 2026

TECHNICAL SKILLS

Programming: Python, Java, JavaScript, TypeScript, C++, C, SQL, LaTeX, R

ML: PyTorch, TensorFlow, Keras, Scikit-learn, XGBoost, LangChain, Pandas, NumPy, SciPy, OpenCV, Matplotlib

Data & Cloud: MySQL, PostgreSQL, MongoDB, Google Cloud Platform (GCP), Git

Web Development: React.js, Next.js, REST APIs, HTML/CSS, Jekyll, Tailwind CSS, Material-UI

Finance: Bloomberg Terminal, Eikon Terminal, Microsoft Excel/Word/PowerPoint

EXPERIENCE

Stealth BioTech Startup

Machine Learning Developer Intern

Hong Kong
Jul 2024 – Aug 2024

- Implemented RNN and DCNN models in TensorFlow to predict knee joint angles from muscle sensor data, targeting the published benchmark of 9.19° RMSE and 0.92 correlation across 22 subjects for real-time prosthetic control.
- Prototyped a RAG-based medical diagnosis chatbot using Llama 3.1 and MongoDB vector search, building the end-to-end pipeline from document ingestion to symptom-based semantic retrieval across 50+ medical sources.

Deloitte

Consulting Intern – Deloitte Digital

Hong Kong
Jun 2023 – Aug 2023

- Managed ServiceNow dashboard operations across 4 global enterprise clients serving 1,000+ end users, coordinating 150+ daily Chinese-English translated notifications to align cross-regional stakeholders.

Project Melo | [Website](#)

Fellow

Hong Kong
Jan 2022 – Jul 2022

- Selected as 1 of 20 fellows in a leadership program co-founded by Two Sigma APAC CEO Kenny Lam, collaborating with 45+ Hong Kong CEOs and business leaders. Delivered a TED-style talk to 500+ global executives. | [Article](#)
- Co-founded McDonald's HK's first youth advisory board with Miss Hong Kong winner Louisa Mak and Bowtie CEO Fred Ngan, advising CEO Randy Lai on menu and marketing strategies targeting 18–25 demographics.

PROJECTS

Time Series-Driven Portfolio Optimization and Backtesting System

May 2024 – May 2025

- Benchmarked CatBoost, Transformer, and neural network models for next-day return forecasting across the top 100 NYSE stocks, engineering 20+ technical features from OHLCV data and achieving a 1.5 backtested Sharpe ratio.
- Backtested systematic long-short trading strategies over a 10-year historical window, evaluating models on metrics such as Sharpe ratio, Information Ratio, and maximum drawdown. Supervised by Associate Professor Wilfred Ng.

Smart Debt Settler | [Blog](#) | [GitHub](#)

Dec 2024 – Jan 2025

- Built a Python CLI tool using heap-based greedy matching to minimize the number of transactions needed to settle multi-party debts, reducing manual calculation from ~30 minutes to under 30 seconds.

HKUST Corporate Consulting Project with JPMorgan Chase & Co | [Blog](#)

Sep 2023 – Jan 2024

- Designed a Global ETF Sales Dashboard aggregating market sentiment and trend signals from news and social media for JPMorgan Asset Management's ETF sales team. Awarded 1st place. | [Article 1](#) | [Article 2](#)
- Built an ETF screening tool using Retrieval-Augmented Generation (RAG) with Llama 2, LangChain, and MongoDB, enabling salespeople to identify relevant ETFs through semantic search, reducing lookup time by 70%.
- Developed a customer profiling proof-of-concept integrating Salesforce CRM data, financial news, and client meeting logs with Hugging Face NLP models to generate personalized ETF recommendations (2–5 per client per month).

HKUST Corporate Prototyping Project: AI for Bond Prediction | [Blog](#)

Jun 2023 – Aug 2023

- Developed a bond pricing and credit spread migration prediction dashboard utilizing Next.js and Google Cloud Platform for two corporate banking and fixed-income sponsors. Led front-end development and awarded 2nd place. | [Article](#)
- Sourced and preprocessed fixed-income data from Eikon Terminal and Yahoo Finance, engineering 62 features used to train ensemble models that predicted yearly credit rating migrations with ~80% back-tested accuracy.

ADDITIONAL INFORMATION

Languages: English (Native), Thai (Fluent), Mandarin (Basic), Cantonese (Basic)

Awards/Scholarships: HKUST Full Tuition Scholarship, ESF Chairman's Award for Excellence, DDP T&M Elite Student Scholarship, Discovery College Academic Scholarship, Venture Scout Award, Chief Scout Award

Interests: Poker, Chess, Guitar, Volleyball, Hiking, Gym, Scouting, Taekwondo (2nd Dan Black Belt)