

HAOYU (VINCENT) TIAN
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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

Candidate for Master of Business Analytics, Operations Research Center, August 2024, GPA: 4.00/4.00 2023 - Present

- **Deep Learning Project:** Utilized Amazon product images to generate Google Gemini image captions, constructed 3k DALL-E 2 images and fine-tuned VGG19, Resnet50 and EffNet architectures, improved baseline error rate by 96% (*Python*)
- **Leadership: VP of Blockchain Club**, organized mixer event with MIT, Harvard Business School and Harvard Law School

UNIVERSITY OF MELBOURNE

Melbourne, Australia

Bachelor of Science in Mathematics and Statistics, GPA: 3.92/4.00

2017 - 2020

- **Awards:** Study Abroad Scholarship in Statistics - University College London (Spring 2019)
- Transferred from the University of Western Australia (Fall 2019)

TECHNICAL SKILLS

- **Programming:** Python (scikit-learn, PyTorch, TensorFlow, Keras), R, Julia, Git, SQL, Java, C, MATLAB, SAS
- **Tools:** Snowflake, GCP (BigQuery, VertexAI), AWS (Sagemaker, S3), Azure, LLM (GPT-4, LLaMA, Gemini), PowerBI

EXPERIENCE

WEB3 AI STARTUP

Cambridge, MA

Featured as an innovative AIxWeb3 project on the largest Web3 platform in the Asia-Pacific region Jan 2024 - Present

Co-Founder

- Leading a team of 7 to build the first end-to-end AI-powered Web3 analytics tool that scrapes and clusters text data from Telegram, Discord and Twitter to generate personalized market and sentiment analysis insights using LLMs
- Utilized feature extraction (NER, TF-IDF) from text messages for unsupervised HDBSCAN clustering into topics discussed
- 1 of 17 finalists selected from 238 teams at Edge Matrix Computing (EMC) DeAI Hackathon; Presented to audience of 30 consisting of EMC CEO, AI Lead of EMC Lab, AI and ML Researchers, Professors, VC and Web3 founders

MACY'S | MIT Capstone

New York City, NY

Data Scientist Intern

Feb 2024 - Present

- Performing ongoing exploratory data analysis and feature engineering using BigQuery SQL and VertexAI on 1B rows of transaction, customer, loyalty and product data
- Building customer price brand models and refining recommender systems for personalized e-commerce/in-store experiences
- Presenting to non-technical audiences, discussing product use cases with business stakeholders and directors

QUANTIUM

Melbourne, Australia

Data science enterprise working with the largest supermarket, telco and financial services

Feb 2021 – Jun 2023

Data Scientist, Product Analytics, Health & Government

- Elevated XGBoost models by 2% in Python, introducing the state government's first daily population estimation method, enhancing risk planning across all suburban areas during Covid-19
- Pioneered engagement metrics and XGBoost models in R for churn identification; presented to product executives
- Led a 5 person PowerBI workstream on a \$400k project to develop an end-to-end tool that analyzes trends in education and health, aiding in identification of at-risk communities; led to a \$2M contract extension
- Engineered automated decision support tool pipeline used in daily meetings by Emergency Management Commissioner and Victorian Chief Medical Officer, reduced weekly labor by 14 hours
- Collaborated with Product Managers and Engineers to address client inquiries, plan tasks and facilitate debugging
- Mentored 10 Associate Data Scientists team members in Python, SQL, Git over one year

FORTECUE METALS GROUP

Perth, Australia

One of the world's largest and most cost-efficient iron ore producers

Nov 2020 – Feb 2021

Data Scientist Intern, ML & AI team

- Created Random Forest, LightGBM and Multi-Layer Perceptron models in Python to complement existing manual testing process, boosted oil quality prediction efficiency for technicians by 100%
- Implemented MLOps solutions, deploying a Random Forest model on AWS using Lambda and Step Functions
- Conducted data preprocessing and exploratory analysis of oil testing data in AWS Sagemaker, gained experience using S3

ADDITIONAL INFORMATION

- Languages: Mandarin (fluent), Interests: Novice Film Reviewer, Dedicated NBA/Soccer fan (English Premier League)