Jiaxun Hao

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EDUCATION

University of Pennsylvania **01/2022-12/2023**
Master of Computer and Information Technology
University of California, San Diego **09/2019-12/2020**
Master of Quantitative Finance
Central University of Finance and Economics **09/2014-06/2018**
Bachelor of Applied Economics

SKILLS

- **Programming Languages**: Python, SQL (MySQL, PostgreSQL), R, MATLAB
- **Big Data & Cloud Technologies:** Spark, MongoDB, AWS
- **Development Tools & Frameworks:** Git, Docker, Conda, Airflow, PyTorch, MLflow, Flask
- **Statistical Methods:** Hypothesis testing, A/B testing, Machine Learning Algorithms [link], Deep Neural Networks[link]

AI/ML PROJECTS

- **Trigger word detection:** Built a small Conv NN model from scratch using PyTorch to detect the trigger words in audio clips with accuracy as 92.38%
- **Music generation:** Built a RNN framework with LSTM layers from scratch to generate jazz music clips
- **Name entity recognition:** Retokenized CoNLL dataset (20000+ sentences from news articles) to match up to the BPE tokenizer of BERT, trained BERT to recognize name entities with overall f1 score as 0.88
- **Natural Language Inference:** Processed and tokenized Multi-genre NLI dataset (433000 manually-annotated sentence pairs from various genres), trained BERT to infer logic relations between sentence pairs with f1 score as 0.67

PROFESSIONAL EXPERIENCE

Zebit **01/2022-09/2023**
Data Analyst, Credit & Fraud Risk **San Diego, CA**

- **Provided rule-based solutions that saved multi-million dollars in 2022 peak season,** by diving deep into user behaviors data (credit applications/account logins/payments) and identifying fraudulent patterns, worked cross-fuctionally with marketing, engineering, and operational teams
- **Prevented account takeover risk by 16.37% through an automated anomaly detection framework** that sent warning emails regarding massive suspicious activities in the registration/login/point-of-sale to the operational team and data science team
- **Reduced fraud risk by 14.82% after deploying a machine learning model(XGBoost) in the application process** to predict the fraud probability of new customers
- **Enhanced efficiency of the operational team by 37.19%** by automating their chargeback process with transaction-screening pipelines
- **Monitored fraud metrics** during the launch of an identity-verification tool in a user-centric manner, communicated unexpected metrics changes with software engineers to **ensure a seamless customer experience and stable revenue growth**
- **Developed and maintained Dashboards to monitor credit risk of existing portfolio** daily, provided analytical and actionable insights to senior leadership and cross-functional stakeholders