Grant Chen

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EDUCATION

University of Chicago — Chicago, US
M.S. in Statistics (GPA: 3.64 / 4.00) — Sep. 2022 - March. 2024 (Expected)
Courses: Big Data, Applied Linear Stat Methods, Multivariate Statistical Analysis, Statistical Analysis in Clinical Trial

National Chengchi University — Taipei, Taiwan
B.S. in Statistics and Minor in Management Information Systems (GPA: 3.84 / 4.00) — Sep. 2017 - Jan. 2022
Honor: Academic Excellence Award (top 5% of class in semester)
Courses: Machine Learning, Computing for Business Data Analytics, Algorithms, Database application, Regression analysis

SKILLS

Programming Languages: Python, R, SQL, SAS
Tools: AWS, Git, Hadoop, Spark, Linux, Flask, Elastic, Docker, Tableau, PowerBI, Excel, SPSS
Machine Learning Frameworks: Pytorch, TensorFlow, Keras, Scikit-learn
Knowledge: Statistical Analysis, A/B testing, Machine/Deep Learning, Natural Language Processing, MLOps, Business

PROFESSIONAL EXPERIENCE

Argonne National Laboratory — Chicago, IL
Lead Data Scientist — Sep. 2023 - Present

- Headed 5-person collaborative project with University of Chicago, utilizing Scrum methodology to develop AI-enhanced policy management system for optimizing operational requirements
- Led knowledge graph-based digital twin system for policy documents, leveraging Large Language Models to achieve 80% reduction in manual effort required for discovering and maintaining requirements
- Implemented Neo4j graph database for enhanced data management and visualization, facilitating discovery of concealed document relationships

Industrial Technology Research Institute (ITRI) — Hsinchu, Taiwan
Data Scientist — June. 2023 - Sep. 2023

- Enhanced recommendation model by fine-tuning Large Language Models (LLMs) for precise information extraction and accurate embeddings from product text descriptions
- Engineered end-to-end data pipeline by utilizing Spark for text preprocessing and Elasticsearch for unstructured data management, resulting in 400% improvement in data processing speed
- Deployed recommendation model on AWS EC2 using Flask and Docker, leading to 67% reduction in response time, accommodating over 100,000 users during a high-traffic exhibition

Research Center for Information Technology Innovation (CITI), Academia Sinica — Taipei, Taiwan
Machine Learning Researcher, Computational Finance and Data Analytics Lab — Oct. 2021 - May. 2022

- Enhanced E.SUN Bank's Fund Recommendation System using Neural Collaborative Filtering, integrating user metadata including Know Your Customer (KYC) data, purchase history, and fund feature analysis, leading to 48% boost in sales
- Developed Multi-Behavior Recommendation Model with novel embedding design and submitted to IJCAI conference
- Conducted in-depth analysis and delivered valuable insights from 30+ papers to non-technical stakeholders, focusing on potential applications in finance domain

Fubon Financial Holding Co., Ltd. — Taipei, Taiwan
Data Analyst Intern — July. 2020 - Aug. 2020

- Transformed actionable insights from customer segmentation and churn prediction model into effective strategies via collaboration with cross-functional teams in Product, Marketing, IT, and Sales, driving 36% increase in financial product sales
- Established and maintained Tableau dashboards for real-time monitoring of marketing campaigns and sales performance, resulting in 76% reduction in daily report generation time
- Implemented a combination of Selenium crawler and Natural Language Processing to label 20,000 merchants, resulting in 400% increase in efficiency and 80% reduction in manual tasks

Data Yoo Application Co., Ltd. — Taipei, Taiwan
Data Science Intern — Jan. 2020 - June. 2020

- Deployed price forecasting model in AWS SageMaker, establishing retraining pipeline for continuous improvement
- Conducted multiple end-to-end A/B tests to enhance the user interface and evaluate new features, resulting in 25% increase in user engagement and a 30% improvement in conversion rate
- Designed and managed Tableau dashboards for agricultural wholesalers and retailers, providing instant visualization of crop price trends and trade volume fluctuations