Grant Chen

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EDUCATION

University of Chicago	Chicago, IL
M.S. in Statistics (GPA: 3.7 / 4.0)	Sep. 2022 - March. 2024
National Chengchi University	Taipei, Taiwan
B.S. in Statistics and Minor in Management Information Systems (GPA: 3.9 / 4.0)	Sep. 2017 - Jan. 2022

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: Casual Inference, Survey Study, A/B testing, Machine/Deep Learning, NLP, MLOps, Business Intelligence, Scrum

PROFESSIONAL EXPERIENCE

NORC at the University of Chicago - Chicago, IL   Oct. 2023 - Present
Data Scientist   *Azure, ML Pipeline, PowerBI, XGBoost, Survey Study*
- Implemented a reproducible pipeline for identifying and visualizing bias in NORC's vendor data and flag prediction models, targeting inaccurate flags and underrepresented populations to improve the representativeness of survey results
- Analyzed biases in predictions for African American individuals of NORC's flag prediction models by cross-referencing census tables and AmeriSpeak data, focusing on addressing misinformation and underrepresentation in demographic distribution

Data Science Clinic, Data Science Institute at the University of Chicago - Chicago, IL   Sep. 2023 - Present
Lead Data Scientist   *HuggingFace, PyTorch, LLM, Generative Model, Sentiment Analysis*
- Headed team collaboration with Chicago Trading Company, employing prompt engineering on GPT4 for automating financial market tweet labeling and implemented LLM for sentiment scoring, reducing 16% of Mean Squared Error (MSE) in stock prediction
- Supervised collaborative development of Stable Diffusion generative model with Fermi Laboratory, achieving 92% accuracy in approximation of physics experiments
- Led the implementation of AI-enhanced policy management system in Argonne National Laboratory, leveraging Large Language Models and Neo4j graph database to achieve 80% reduction in manual effort for information retrieval and updates

Industrial Technology Research Institute (ITRI) - Hsinchu, Taiwan   June. 2023 - Sep. 2023
Data Scientist   *AWS, PySpark, Docker, Flask, HuggingFace, LLM, ETL*
- Enhanced recommendation model by fine-tuning Large Language Models (LLMs) with HuggingFace 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, increasing 400% in data processing speed
- Deployed recommendation model on AWS EC2 using Flask and Docker, decreasing 67% response time and accommodating 100,000+ users during a high-traffic exhibition

Research Center for Information Technology Innovation (CITI), Academia Sinica - Taipei, Taiwan   Oct. 2021 - May. 2022
Machine Learning Researcher, Computational Finance and Data Analytics Lab   *Pytorch, Recommendation System, Literature Review*
- Enhanced E.SUN Bank's (Top 3 financial institutions in Taiwan) Mutual Fund Recommendation System by Neural Collaborative Filtering by integrating user metadata including Know Your Customer (KYC) data, purchase history, and fund feature analysis, boosting 65% in revenue
- Established 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   July. 2020 - Aug. 2020
Data Analyst Intern   *Hadoop, PySpark, SQL, Tableau, NLP, Customer Segmentation, Customer Retention*
- Coordinated with cross-functional teams in Product, Marketing, IT, and Sales to transform actionable insights from customer segment and churn prediction model into effective strategies, increasing 36% financial product sales
- Established and maintained Tableau dashboards for real-time monitoring of marketing campaigns and sales performance, reducing 76% daily report generation time
- Implemented a combination of Selenium crawler and Natural Language Processing to label 20,000 merchants, reducing 80% manual processing time

Data Yoo Application Co., Ltd. - Taipei, Taiwan   Jan. 2020 - June. 2020
Data Science Intern   *AWS SageMaker, Tableau, A/B Testing, Price Forecasting*
- 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, achieved 25% increase in user engagement and 30% in conversion rate
- Designed and managed Tableau dashboards for agricultural wholesalers and retailers, providing instant visualization of crop price trends and trade volume fluctuations