Yu-Wei Chen

✉ grant.chen0814@gmail.com   ✆ (773) 684-6846   ↻ [LinkedIn](#)   ↻ https://github.com/ywchen814

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: Applications and Techniques

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: Tableau, PowerBI, AWS, Git, Hadoop, PySpark, Linux, Flask, Elastic, Docker, 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

Industrial Technology Research Institute (ITRI)	Hsinchu, Taiwan
Machine Learning Engineer	June. 2023 - Sep. 2023

- Implemented Unsupervised Item-Based Recommendation Model for exhibition industry, leveraging Sentence-BERT to extract valuable information from product text descriptions
- Deployed the recommendation model on AWS EC2 using Flask and Docker

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

- Improved Fund Recommendation System in E.SUN Bank by utilizing Neural Collaborative Filtering and incorporating metadata of users and items, resulting in 50% increase in sales
- Developed Multi-Behavior Recommendation Model with novel embedding design and submitted to IJCAI conference

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

- Improved financial product retention by 20% during Covid by designing marketing strategies with marketing team, utilizing actionable insights from customer churn prediction model built with Logistic Regression and Random Forests
- Collaborated with marketing team to develop KPIs and designed Tableau dashboards for tracking marketing campaigns
- Implemented 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, achieving substantial improvements in user engagement and conversion rate
- Built Convolutional Neural Network for mango-level classification to address labor shortages and high costs in Taiwan's agricultural industry, reducing labor costs by 90% and increasing classification speed by 500%

PROJECTS

Predictive Model for Critical Illness Insurance Purchases	March. 2020 - June. 2020

- Built an XGBoost model to predict customer purchase of critical illness insurance with accuracy over 90%
- Packaged the results into a business proposal to Cathay Life Insurance Ltd. for maximizing benefits

Survey Research on Hotai Motor Co., Ltd.'s Consumers' Purchase Intentions	Sep. 2019 - Feb. 2020

- Applied Principal Component Analysis to extract latent factors that influence car-purchasing decisions
- Conducted customer segmentation by KNN to develop marketing strategies, leading to 30% increase in sales volume