# PI-YU (Peggy) WU



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#### **CAREER SUMMARY**

8 years' experience as a data scientist in a SaaS company and high-growth financial institutions, utilizing statistical approaches, exploratory analysis, experimental design, and machine learning modeling to solve business problems. Experienced data scientist that can deliver actionable insights and user-friendly data visualizations for cross-functional business stakeholders. Increased weekly active users and feature usage by over 50% through marketing experiments.

#### **WORK EXPERIENCE**

Delivery Data Technical Lead | FLYR (Labs) | Customer Success | Santa Monica, USA July 2023-Jan 2024
The first Al-powered revenue management software for airlines

- Led a 2-member data analyst team to ensure SQL data pipeline stability (1TB+ data daily) and building data models for Machine Learning models while collaborating with data scientists. Utilized SQL, Python, and tools like DBT, and Airflow.
- Initiated a data quality improvement project, enhancing product scalability and data reliability for ML models under diverse airline(client) data sources. Required cross-functional communication with product managers, airline experts, data analysts, and data scientists.
- Addressed complex product feature issues involving both client and company's system design via extensive discussions with code scripts, engineers, product owners, and clients. Delivered solutions aligned with client and product interests.

### Data Scientist II | Evernote | Analytics Department | Remote, USA

July 2022-May 2023

The first cloud-sync enabled notetaking and task management application

- Increased weekly active users and feature usage by over 50% through successful marketing experiments. Defined appropriate business metrics, recommended sample sizes for test/control, selected ideal users for experiments, and calculated statistical significance on audience groups before and after the tests.
- Conducted an efficiency analysis of push notifications, resulting in a 10% reduction in unnecessary notifications while maintaining high user engagement. Adjusted push audience and frequency based on user profiles and recent activity. Utilized SQL, Tableau, Python, R, and slides for comprehensive analysis and presentation.
- Developed Tableau live dashboards to monitor experiment impact on core and target business metrics in real-time, reducing individual analysis time by 50%. Provided easy access to primary test results for product and marketing teams without data scientist involvement.
- Resolved data hurdles through cross-functional communication and advanced SQL skills. Quickly delivered simulating missing activity data and feature usage insights for our very first yearly usage summary review, which led to positive social media discussions.

### E.SUN FHC, (E.SUN Bank) | Taipei, Taiwan

Listed by The Banker World Top 500 Most Valuable Banking Brands

#### Senior Data Scientist | E.SUN Bank | Digital Finance and Customer Analytic

Feb 2021-May 2021

- Directed future development of the bank through contributing a vital restructuring strategic project led by McKinsey & Company. Hand-picked by the CEO's management team to join the project as the only data scientist and responsible for multiple analytics presentations for C-level meetings.
- Pioneered a new department and managed an adept analyst team of 5 people. Created a cross-functional team including product, marketing, risk, and legal team to set up new KPI for the new product financial product bundles for different spending tiers customers. (Heavily using SQL)

### Machine Learning Engineer & Project Manager | E.SUN Bank | Intelligent Finance May 2018-Mar 2021

• Predictive model on loan applications: Developed and managed an income prediction end-to-end machine learning model project that empowered a fully automated loan approval process with risk well-controlled. On average 416 manpower days were reclaimed yearly without increasing any credit risk to the business after project launch. Project is built with BERT, KMeans, LightGBM, API calls, and is deployed/maintained with MLops CI/CD. Stakeholders involved legal and business departments. (Project is scripted in Python and SQL)

• **Predictive model on marketing**: Decreased marketing costs by 50% while achieving the same marketing objectives through incorporating marketing strategy and deployment of machine learning models. Model was developed with LightGBM (GBDT) classification and deployed with Azure DevOps. (Project is scripted in Python and SQL)

## Data Scientist | E.SUN FHC | Customer Risk and Value

Sep 2016-May 2018

• **Predictive model for retention:** Initiated projects to acquire and retain loyal customers which is now used as the core strategy for the credit card department. Defined metrics for determining customer engagement and designed various monitoring methods using logistic regression with Python to maintain 40% more customers.

Student Consultant | DriveTime Automotive Group Inc. | Data Science | Seattle

Mar 2022-Jun 2022

- One of the biggest used car retailer and finance company in the USA
- Led a team of 5 to design and execute a solution for optimizing reserve prices for used cars in dealer auctions to increase profit margins while maintaining high likelihood of sales
- Supervised ML model: Proposed an innovative approach, including data simulation and predictive modeling (XGboost and LightGBM), to overcome challenges caused by missing important bidding data, which is required for most of the reserved price simulations. Created a compelling data story for the business team through graphs, charts, and results from Explainable AI (SHAP) to clarify how the model makes predictions. (Project is scripted in Python)

### **SKILLS**

- Language: Native level in Mandarin, Professional level in English
- Technical: SQL-Big Query/ PostgreSQL, Tableau, Python-Pandas/ NumPy/ scikit-learn, Machine Learning- Gradient Boosting (GBDT)/Random Forest/ Logistic Regression/Decision Trees/Predictive Modeling/ Neural Networks, Airflow, Explainable AI (LIME, SHAP), SAS, DevOps,

#### **EDUCATION**

## University of Washington - Michael G. Foster School of Business

Seattle, WA

June2021-June 2022

Aug 2012-June 2016

Master of Business Analytics

Graduated with honors (top 5), GPA: 3.8

Courses included: Machine Learnings, Digital Marketing (causal inference, SEO), A/B testing, Data Visualization

#### **National Chengchi University**

Taipei, Taiwan

Top 5 University and Top 2 Business School in Taiwan

Bachelor of Art, Major: Business Administration, Minor: Law, GPA 3.7/4.0