

# Pei Hua, Tsai (Tina, Tsai)

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## Skills:

- Programming: **Python, R, SQL**
- Data Analysis: **Excel (VLOOKUP, Pivot Tables)**
- Visualization: **Power BI, Tableau**

**Certifications:** Entry Certificate in Business Analysis (ECBA) in Progress, AWS\_Academy\_Cloud\_Foundations\_Badge

**Organization:** UTD Infinity Lions Club, UTD Taiwanese student association – former vice president

## EDUCATION:

**The University of Texas at Dallas** Dec 2025  
**GPA 3.6**  
*Master of Science, Business Analytics &AI*

Selected Coursework: Advanced Statistics, Business Analytics with R, Machine Learning, Causal Analytics & AB Testing

**Fu Jen Catholic University**, New Taipei City, TW Jun 2024  
**GPA 3.7**  
*Bachelor, Statistics and Information Science*

Selected Coursework: Regression Analysis, Data Mining, Time Series Analysis, Data Visualization, Database Management

## WORK EXPERIENCE:

**Data Analytics intern** Jul 2023 – Jun 2024

TPE Ideal Marketing Consulting Co., Ltd, Taiwan

- Developed **Python-based ETL** workflows to extract and clean 1,000+ industry records, providing data-driven insights for commercial decision-making.
- Optimized 30,000+ company records in Excel using advanced functions, increasing data accuracy and reporting speed for strategic planning.

## ACADEMIC PROJECT EXPERIENCE:

**Movie Review Sentiment Analysis & AI Chatbot** Nov 2025 – Dec 2025

- Leveraged **KNIME** to analyze 2,200+ customer reviews, identifying 4 critical market themes through word cloud visualizations to drive content strategy.
- Developed with 64% accuracy to automate audience feedback monitoring and provide real-time insights into brand perception.
- Integrated **Generative AI** to build a chatbot capable of responding to user queries regarding movie evaluations.

**Campus Safety Optimization (Microsoft Project)** Oct 2025 – Nov 2025

- Identified operational inefficiencies in campus safety services by analyzing 500+ stakeholder feedback records, highlighting critical resource gaps.
- Proposed a data-driven solution leveraging **Azure** and **Microsoft Teams** for real-time location tracking and incident reporting.
- Designed an interactive **Power BI** dashboard to visualize findings and present actionable insights to project stakeholders

**Utilizing Big Data to Study the Potential Risk Factors in Human Liver Cancer** Sep 2023 – Jan 2024

- Analyzed data from 600 individuals using **R** to identify key risk factors associated with liver cancer.
- Applied **statistical methodologies** including ANOVA and Mann–Whitney U tests to determine 3 statistically significant risk drivers.

**Predicting Air quality in Taiwan** Mar 2023 – May 2023

- Built predictive models using **Python (scikit-learn, pandas)** to forecast air quality levels with 79% accuracy, utilizing algorithms such as **Random Forest** and **SVM** for performance benchmarking.
- Designed a **database-backed data pipeline** to support data ingestion, cleaning, and analysis for air quality forecasting.

## COMPETITION EXPERIENCE:

**2025 DataWhiz Data visualization competition** Mar 28, 2025

- Processed and cleaned 88.3K data points to ensure data accuracy and integrity across multiple sources.
- Developed interactive **Power BI dashboards** and presented actionable insights to faculty, improving interpretation of analytical results.