

# Chia-Yi Yen

Bellevue, WA | (925)819-9608 | [chia-yi.yen@utdallas.edu](mailto:chia-yi.yen@utdallas.edu) | <https://www.linkedin.com/in/chiayi-yen/> | <https://nadiayen.github.io/>

## SKILLS and CERTIFICATES

- Analytical skills: SQL, Python (Pandas, NumPy, Scikit-learn, PyTorch), R, Spark, Hive, Hadoop, SAS, NoSQL(mongoDB)
- Visualization skills: Tableau, PowerBI, Python (Matplotlib, Seaborn), R(ggplot2)
- Language skills: Chinese (Mandarin), Hokkien, Italian
- Certificates: [Graduate Certificate in Applied Machine Learning](#) December 2023  
[Google Advanced Data Analytics Certificate](#) January 2024

## EDUCATION

**The University of Texas at Dallas, M.S. in Information Technology and Management** — Texas, US August 2024  
Modules: Data Analytics (SQL, Python, R), Big Data (Spark, Hive, Hadoop), Machine Learning (Python) **GPA 3.83**  
**National Sun Yat-sen University, M.S. in International Relations** — Kaohsiung, Taiwan **GPA 3.99**  
**Fu Jen Catholic University, B.A. in Italian Language and Culture** — New Taipei, Taiwan **GPA 3.10**  
Exchange program: L'Università Ca' Foscari — Venice, Italy

## PROFESSIONAL EXPERIENCE

**PACCAR Financial** — Bellevue, US June 2024- September 2024

*Sales and Service Analytic Intern*

Python / SQL / Tableau / Salesforce / Snowflake / Problem-solving / Sales Forecasting / Business Requirements

- Initiated and developed SalesPoints Recommender using Python, identifying optimal Used Truck Centers for selling different type of truck. Significantly enhanced sales efficiency and increasing daily operations rates by 23%.
- Identified sales patterns and navigated inventory-related challenges by analyzing sales data using Python and Tableau.
- Employed Python and Excel to manipulate data from two databases to improve data integrity, maintaining a 97% accuracy rate.

**Taroko Door and Window Technologies Inc.** — Kaohsiung, Taiwan

August 2020- August 2021

*Project Manager*

SQL / Advanced Excel / Project Management / Ecommerce / Consumer Insights / Sales Forecasting / Market Analysis

- Identified key problems by analyzing sales data and market trends using SQL and Excel to navigate pandemic-related challenges.
- Spearheaded a data-driven approach to improve media engagement, utilizing A/B testing and correlation analysis to boost Facebook interaction by 315% and search ranking performance. Surpassed original target by 15%.
- Strategized product positioning by analyzing pricing, sales forecasts, and competitors' products.
- Orchestrated cross-functional meetings across four departments to establish a new SOP for manufacturing product, improving productivity and efficiency metrics, resulting in a 25% faster project delivery.

*International Sales Representative*

February 2020- August 2020

Data Exploration / Stakeholder Communication / Media Analysis / Web Analysis

- Created competitor intelligence reports using web scraping and geographic analysis.
- Increased reach rate of the official website by 180 % using keywords in Google Trends.
- Boosted social media visibility 120% through analyzing consumer behavior using exploratory data analysis.

## PROJECT

**Online Review Analysis for a Food Company Using NLP**, Applied Natural Language Processing February 2024- May 2024

- Utilized Natural Language Processing techniques (tokenization, sentiment analysis, topic modeling, named entity recognition) with Python (NLTK, SpaCy) to extract insights from a large volume of online customer reviews and inform business decisions.

**Convolutional Neural Network Fine-tuning**, Applied Deep Learning

October 2023- November 2023

- Achieved an impressive test accuracy of 99.46% with a low loss of 0.0202 by using Keras Tuner to fine-tune hyperparameters for a Convolutional Neural Network (CNN) model, optimizing performance and enhancing predictive accuracy.

**CO2, Methane, GDP, Population, and Temperature Relations**, Applied Machine Learning

March 2023 – May 2023

- Developed and compared models using Ridge, Lasso, Random Forest, Decision Tree, and K-Nearest Neighbors, evaluating performance to identify the most effective model.

**Truck Data Analysis**, Big Data

March 2023 – May 2023

- Utilized Spark and Hadoop for processing large datasets and created visualizations and dashboards using Tableau.

**Youtube Video Click Rate Analysis**, Database Foundation for Business Analytics

October 2022 – December 2022

- Designed and implemented a database using Excel and SQL. Performed advanced SQL queries on extensive YouTube click rate datasets to uncover actionable insights and support business analytics.

**Classification- Decision Tree Analysis**, Modeling for Business Analytics

October 2022 – December 2022

- Leveraged decision tree modeling to analyze and predict customer behavior. Trained the model using cross-validation. Evaluated model performance with metrics, and interpreted results to uncover key customer behavior patterns.
- Applied random forests and k-nearest neighbors to identify customer clusters, deploying it to support targeted marketing strategies.

**Movie Box Revenue Prediction**, Modeling for Business Analytics

August 2022 – October 2022

- Used ML algorithms (principal component analysis; PCA) to build predictive models, analyze data and business insights.

## ADDITIONAL INFORMATION

*Eligibility:* F1 visa (STEM), eligible to work in the US for internships and full time for up to 36 months.