Li-Wei (Jerry) Cheng

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**EDUCATION** 

Arizona State University - W.P. Carey School of Business

August 2022 – May 2023

Master of Science in Business Analytics (MSBA)

Tempe, AZ

Feng Chia University

August 2014 – June 2018

Bachelor of Management Science (BMS) – Transportation and Logistics

Taichung, Taiwan

## TECHNICAL SKILLS

Programming Languages: Python (Pandas, NumPy, Sklearn, TensorFlow, PyTorch, PySpark), SQL, R

**Technical Skills:** Predictive Modeling, Clustering, Statistical Analysis, NLP, A/B testing, Data Visualization, RAG Causal Inference, Recommendation Systems, Time Series Forecasting, RESTful APIs, CI/CD, Lean Six Sigma, LLM

Tools: Tableau, Power BI, SQL server, SSRS, Git, Spark, Jenkins, Docker, Azure Databricks, AWS, Alteryx, SAP, Agile, Scrum

## PROFESSIONAL EXPERIENCE

Data Analyst August 2023 – Present

Parker and Sons Phoenix, AZ

- Lead BI developments and create impactful metrics across 43 business units, driving a 25% increase in operational revenue
- Design large-scale ETL pipelines and automate end-to-end data flow to process 32 million data points by 20% faster
- Develop and test cloud-based data clusters on SQL Server and Azure Databricks, ensuring robust reporting solutions

• Initiate data migration and collaborate with leadership teams, enhancing scalability for data integration and user engagement **Research Aide**May 2023 – August 2023

Arizona State University Research Lab

Tempe, AZ

 Developed a training process within computer vision by implementing Transfer Learning with the pre-trained YOLOv8 model, achieving a 90% precision in object detection and classification

# **Data Scientist (Capstone Project)** IBM

December 2022 – May 2023

Tempe, AZ

- Applied AI/ML techniques to 2M+ rows of unsupervised data to build predictive models and a recommender system using Python, SQL, and Tableau with the intention of saving costs by 40%
- Performed exploratory analysis and feature engineering to reach valuable and unexplored conclusions; Segmented customers into homogenous clusters using K-means and identified key drivers of client satisfaction; Defined payment duration to evaluate the incremental impact on credit
- Created real-time data visualization dashboards to pinpoint product opportunities across the entire procurement funnel

**Data Analyst**BEV International Food Corp.

August 2022 – December 2022 Tempe, AZ

- Led a 5-person data team in developing ARIMA model to forecast monthly product demand with 15% revenue growth
- Streamlined BI processes using Lean Six Sigma methodologies to optimize operations and inventory management, reducing product cycle time by 20%

**Business Data Analyst** 

March 2019 – July 2022

Yang Ming Marine Transport Corp. (Headquarters)

Taipei, Taiwan

- Forecasted demand using time series analysis to discern market trends and competition for advanced pricing analytics, with a total of 5% increase in average order value
- Developed and executed complex SQL queries through CTE and window functions to conduct ad-hoc analysis and orchestrate shipping schedules, generating an additional \$1.2M USD in revenue
- Generated real-time Power BI dashboards, leveraging DAX formulas to define retention metrics and track key performance indicators (KPIs) through visualizations

#### PROJECTS EXPERIENCE

# **LLM Generative AI Detection** – The Learning Agency Lab

- Developed a DebertaV3 transformer model achieving 99.8% AI-generated text detection accuracy with 18M+ parameters **Gemma Inference** Google DeepMind
- Fine-tuned the Gemma 2b-it model with LoRA for explicit and efficient LLM prompt and response generation

## Multi-AI Agent Systems – CrewAI

• Created a multi-AI agent, leveraging gpt-3.5-turbo API to plan, write, and edit a sequence of input tasks and results

## Sentiment Analysis – Boston Consulting Group

- Transformed data to uncover price sensitivity to provide prescriptive suggestions to improve churn rate
- Deployed KNN-based and Random Forest algorithms to enhance prediction, outperforming the original accuracy by 13%