Pin-Ting (Katherine) Liao

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EDUCATION

SINGAPORE MANAGEMENT UNIVERSITY   Jan 2024 - Jul 2025

Master of IT in Business (Artificial Intelligence) (GPA: 3.46/4.00)

- MITB Scholarship AY2023-24
- Relevant Coursework: Algorithm Design, Machine Learning, Deep Learning for Visual Recognition, Software Development

NATIONAL TSING HUA UNIVERSITY   Sep 2020 - May 2025

Bachelor of Business Administration (Management and Data Science) (GPA: 3.84/4.00)

- Academic Excellence Award AY2022-23 (3rd ranked) / AY2023-24 (1st ranked)
- Relevant Coursework: Programming, Data Structures, Text Mining, Business Analytics, Statistical Analytics

EXPERIENCE

INFINEON TECHNOLOGIES – Singapore   May 2024 - Jan 2025

Infineon Technologies is a leading semiconductor company specializing in microelectronics and power solutions

AI Modeling & Digitalization Engineer

- Developed **computer vision deep learning** models with custom **feature engineering** techniques, increasing accuracy by 15%
- Utilized data analytics techniques for **large-scale data manipulation**, leveraging **SQL** for effective data management
- Integrated models via **REST APIs**, delivering real-time insights to end-users and enhancing data-driven decisions
- Built **end-to-end project pipelines** to tackle business challenges, reducing process time by 99% and achieving cost savings
- Collaborated with a cross-functional team to develop and implement digital transformation strategies, resulting in the successful deployment of an **AI-driven analytics platform**

LINE TAIWAN LIMITED – Taiwan, Taipei   Jun 2023 - Dec 2023

LINE is a communication software company that serves 194 million users worldwide, with 21 million users located in Taiwan

Search & Category Optimization Engineer

- Developed multi-label text classification models using **machine learning** techniques to improve overall user experience
- Streamlined team productivity and efficiency by automating data capture workflows in Python
- Communicated effectively with project managers to devise **innovative strategies** for business challenges

ACADEMIC PROJECTS

SMUMods — End to End Software Development   Jan 2025 - Apr 2025

- Designed a **FastAPI-based backend** with secure authentication using **AWS Cognito** following **Scrum** methodology
- Built **CI/CD pipelines** for automated testing, containerization, and deployment using **Docker & GitHub Actions**
- Developed **unit tests with Pytest** to ensure system reliability and scalability

Spreadsheets Modeling — Pricing Analytics in the Food Delivery Industry   Jan 2024 - Apr 2024

- Analyzed supply and demand trends to develop data-driven strategies, leveraging Excel Macros, VBA and trade-off analysis

LINE Chatbot — SongScout   Mar 2023 - Jul 2023

- Led a team of 5 to leverage **NLP** tools in developing a smart assistance system, significantly enhancing the user experience
- Implemented a **Python-based chatbot** that recommends songs to users by performing **sentiment and text analysis** on lyrics

EXTRA-CURRICULAR ACTIVITIES / LEADERSHIP ROLES

DIT Robotics (Robotics Team) Finance & Public Relation Lead— Taiwan, Taipei   Sep 2020 - Jun 2022

- Ranked second in national **mechanical design** competition with a team of 3, focusing on strategic analysis, and circuit design
- Secured a budget of NTD 1.2 million and presented annual reports to 21 sponsors and stakeholders

ADDITIONAL

- Programming & DevOps: Python (TensorFlow, PyTorch, FastAPI, Pytest, OpenCV, Scikit-learn, Pandas, SQLAlchemy), SQL, C, R, AWS (Cognito), Docker, GitHub CI/CD, API Security Best Practices
- Language Skills: English (Proficient), Mandarin (Native), Taiwanese (Native), French (Basic, DELF A2)