# **KAI-HSIN HUNG**

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#### **EDUCATION**

#### University of the Pacific, Stockton, California

Master of Science in Data Science

Aug. 2024 - May. 2026

Overall GPA: 4.0

Relevant Courseworks: Relational Databases, Data Visualization, Machine Learning, NPL for Data Science

## Ming Chi University of Technology, New Taipei City, Taiwan

Bachelor of Science in Material Science and Engineering

Sept. 2019 - Jun. 2023

Relevant Courseworks: Thermal Dynamics of Materials, Engineering of Mathematics, Semiconductor Processing

# **SKILLS**

Computer Programming: Python, SQL, HTML Language: Mandarin (Native), English (Fluent)

#### **EXPERIENCE**

#### Formosa Plastics Group, Yunlin County, Taiwan

Nov. 2021 - Sept. 2022

Manufacture Engineering (Internship)

- Organized Low-Density Polyethylene factory pipeline data by material, diameter, and length to speed up repairs.
- Used ultrasound for pipeline analysis to confirm completion and reduce issues, cutting leaks by 15%.

#### **Industrial Technology Research Institute, Tainan City, Taiwan**

Sept. 2021 - Oct. 2021

Researcher (Internship)

- Performed welding to produce a reference solar cell per World PV Scale Standard, enabling its use for calibrating solar test machines.
- Used a Four Point Probe to assess solar cell chips, targeting a 2% defect rate reduction.

# SELECTED PROJECTS

#### **K-Nearest Neighbors Prediction**

Feb.2025

• Used the KNN algorithm to build a model, implemented different distance equations for the calculations. and achieved a best accuracy of 87.5%.

#### **Transportation Data Science Project**

Jan. 2025

- Analysis NYC vehicle collisions dataset find the top 5 reasons that cause the accident.
- Utilize data visualization skills to produce the charts, compare relationships between different categories, and recommend solutions to reduce the number of crashes.

#### **Handwriting Classification**

Dec. 2024

- Used the SVD algorithm to classify handwritten data from the dataset.
- Achieved an accuracy of 93.97% with the model.

# Image Compression Dec. 2024

- Used the PCA algorithm to compress several large-sized images.
- Combined the images to generate a new one with reduced noise.