# Hsiang-Jen Li

# Finance & CS Background | Data Analyst @ SCSB

- Seeking a Data & MLOps Engineer role with a focus on research and complex data relationships
- Learning best through teaching
- Establishing development standards
- Standardizing development practices to automate CI/CD
- Unifying dev and deploy environments through Docker

#### hsiangjenli@gmail.com | github.com/hsiangjenli | linkedin.com/in/hsiangjenli | IT Blog Education National Taiwan University of Science and Technology Taipei, Taiwan M.S. in Department of Computer Science and Information Engineering 2024 • Overall GPA: 4.02/4.3 National Kaohsiung University of Science and Technology Kaohsiung, Taiwan • B.S. in Department of Money and Banking 2022 Overall GPA: 3.82/4.3 Experience Shanghai Commercial and Savings Bank Taipei, Taiwan Shanghai Commercial and Savings Bank Taipei, Taiwan • Developed a Public Opinion Analysis System for the SCSB 2023.07 - 2023.08 System Informatics and Management Science - SiMS Lab Skills Language Python, LaTeX Website FastAPI, HTML, CSS/SCSS, Bootstrap Tool git, Docker CI CD Github Actions, MLflow Platform Ubuntu, mac OS, Windows Competitions & Awards Campus Fintech Innovation Challenge 2022 • Hosted by Taiwan Academy of Banking and Finance Ranked as the 8th out of 187 teams Joint Exhibition on Artificial Intelligence and Neural Networks 2022 Hosted by National Kaohsiung University of Science and Technology - Department of Electrical Engineering Ranked as the 1st out of an estimated 30 teams **Campus Achievement Exhibition** 2020 • Hosted by Fintech Space • Competition's preferred choice Research Interests

- Complex Systems and Network Science
- Metaheuristics
- Distributed Computing
- Privacy-Preserving Machine Learning

# Side Projects

2024.08 - 2024.08

Code2Video • A small project for converting the code snippet to the video.

2024.02 - 2024.02 DIMG4MD

A Python package for automatically download the image from the markdown file and save it to the local folder.

Learn Julia 2024.01 - now

• Learning Julia Programming Language with a series of scripts.

#### Awesome Metaheuristic and its Applications

2024.01 - now

- A curated list of awesome metaheuristic and its applications resources.
- Including the basic concepts of metaheuristic, the application of metaheuristic, like Graph Neural Network and Graph Database.
- Also including the latest research papers about metaheuristic.

#### Awesome Complex System and Network Science

2023.12 - now

- A curated list of awesome complex system and network science resources.
- Including the basic concepts of complex system and network science, the application of complex system and network science, like Graph Neural Network and Graph Database.
- Also including the latest research papers about complex system and network science.

# Evasion Attack in Machine Learning

2023.09 - 2023.12

- Trying to use evasion attack to attack the CNN-based maleware detection model.
- Need to add noise to the maleware sample to make the model misclassify the sample.
- The dataset is collected by ourselves (Using Cuckoo Sandbox and VirusShare).

#### 2023 IT home Ironman Challenge - AI and Data

2023.09 - 2023.10

- In this challenge, I had written 30 articles about Network Science and Graph Neural Network.
- Including the basic concepts of Network Science, the application of Network Science, like Graph Neural Network and Graph Database.
- Also including the latest research papers about Graph Neural Network.

#### Web Scraping: Social Network Crawler

2023.07 - 2023.08

- Using Dynamic Web Scraping Packages (Selenium, Playwright etc.) to crawl social network data.
- The data will be stored in MongoDB and can be used for further analysis.

#### Graph-based: Keywords Recommendation System

2023.05 - 2023.06

 $\bullet\,$  Applying Network Science field to build a keywords recommendation system.

# Taiwan Famous Ecommerce: Find Identical Products

2022.11 - 2022.12

2022.05 - 2022.06

- Finding identical products from item's name is a quite challenging task.
- Using Regular-Expression and CKIP-transformer to extract keywords from item's name.
- And using dimension-reduction and cluster algorithms to find identical products.

# Apriori J104

- An application for analyzing the skills required by the job market.
- The data is crawled from 104 job bank and stored in MongoDB.
- And the data will be processed by CKIP-transformer.
- Finally, using apyori algorithm to find the association rules between skills.

# Financial Public Opinion Analysis

2022.03 - 2022.06

- Using Django to build a web application for analyzing financial public opinion.
- The data is crawled from Anue and the data will be stored in MongoDB.

### Line-Bot: Stock Info

2020.10 - 2021.07

• A Line-Bot for getting the stock information.