

Hsin-En Huang

chickenhamgod@gmail.com

+886 988848585



An interdisciplinary fresh graduate, interest in the development of macro economy and renovation technology, familiar with machine learning models and data visualization.

Education

Bachelor of Science in Computer Science 09/2016 – 06/2020
National Taiwan University of Science and Technology, Taipei, Taiwan

Master of Arts in Economics 09/2020 – 06/2022
National Taipei University, New Taipei, Taiwan

Experience

Research Assistant Advisor: Prof. Mau-Ting Lin 09/2016 – 06/2020
National Taipei University, New Taipei, Taiwan

Research Assistant Advisor: Prof. Shou-Yung Yin 09/2016 – 06/2020
National Taipei University, New Taipei, Taiwan

- Preprocessing of economic data and visualization with Python.
- Assist with course preparation and debugging.
- Check students' homework and answer their questions.

Certificates

- Toeic 950
- Senior Securities Specialist
- Financial Derivatives Sales Personnel

- Trust Operations Personnel
- Financial Planning Personnel
- Financial Markets and Professional Ethics

Master Thesis

“Bitcoin Price Forecast Using Echo State Network” (**Thesis link**)

- The Echo State Network is a kind of recurrent neural network with sparsely connected and fixed weights hidden layers.
- Four different model structures are used, including the traditional model ARIMA, the Echo State Network model with different techniques.
- The final result shows Echo State Network with phase space reconstruction can escape from the “Random walk hypothesis” and make efficient forecasts.

Research Project

1. Independent study “Fake News Detect” **Report link github link**

- Use Natural Language Processing (NLP) to analyze news reports and determine whether they are fake news.
- Both the classification and regression analyses have been implemented, and many different models have been discussed.

2. Independent study “Interactive visual dashboard” **github link**

- This project used a package in R Programming language developed by Prof. Mau-Ting Lin, and I did the part of debugging and testing.
- The application plots the chosen data with different kinds of methods. The interactive design can apply to any kind of data.

Autobiography

I am passionate about learning and willing to take on different challenges. I am attentive and like to work as part of a team. I enjoy jogging and swimming during my free time.

Step-by-step, project-by-project

In college, I learned machine learning methods in my independent study. I found that financial data is one of the most common and promising data during the project. Therefore, I felt that if I could acquire deeper financial knowledge, I might be able to interpret these

data and their economic meanings. Then I started reading financial news and discovered my interest in finance.

Moreover, I worked as a research assistant in the graduate school. I assist the professor in course preparation and debugging. It was a great experience that not only taught me more statistical methods, but also interactive visualization.

Computer science background with economic knowledge

In my spare time, I pay close attention to the development of Cryptocurrency. I have taken courses about cryptography, so blockchain technology is very familiar to me, and I have a positive attitude towards the development of cryptocurrency.

My master's thesis was forecasting the price Bitcoin price with a machine learning model called the Echo State Network. Combining the economic analysis and machine learning model, I made efficient forecasts of Bitcoin prices with financial index and historical Bitcoin data.

I am willing to take challenges and keep learning, and I am familiar with machine learning and Cryptocurrency. I hope to improve my ability and develop myself in the Fintech field.

SWOT Analysis

SWOT ANALYSIS

Strength

1. I have a background in computer science and am familiar with popular fintech-related technologies.
2. I am adept at learning new skills and knowledge and ready to take on new challenges.

Weakness

1. I am a perfectionist and need time to consider my decision.
2. I have a different way of thinking from the financial colleague, sometimes I need to explain myself.

Opportunity

1. The booming development of Artificial intelligence offers a great opportunity for the future of the financial sector.
2. Digital Transformation of the financial sector
3. I am connected in multi-field because I have met peers from different fields with my different

Threat

1. This is an era of ever-changing technology, I have to keep educating myself to keep up with the changing world.
2. The financial sector is highly competitive and I need to find my niche and demonstrate my value.