



Hsu, Yao-Chih

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ABOUT ME

I am proactive, diligent, and eager to learn, currently pursuing a master's degree in Statistics in the Department of Applied Mathematics at National Dong Hwa University, with research interests in neural networks, machine learning, and time series analysis.

My research focuses on time series analysis and spatial interpolation. I utilize neural networks to process high-dimensional data, extract meaningful features, and perform future forecasting. In addition, I incorporate spatial coordinate relationships to interpolate missing locations, addressing data gaps caused by machine failures or other factors.

I believe education is a lifelong journey of enlightenment. I aim to make learning enjoyable by simplifying complex concepts and showing students that "science is everywhere in daily life." My goal is to make mathematics relatable by connecting theories with real-world applications, transforming it into a powerful tool for solving problems rather than just formulas.

EXPERIENCE

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|---------------------|---|--|
| ▪ 2025.02 - Now | Hualien Shou Feng Junior High School | ▪ Part-Time Mathematics Teacher |
| ▪ 2024.02 - Now | National Dong Hwa University | ▪ Research assistant
▪ Time series and spatial research
▪ Operations data analysis assistant |
| ▪ 2023.09 - 2025.01 | Hualien Shou Feng Junior High School | ▪ Remedial instruction, tutoring, weekend tutoring and teaching |

EDUCATION

- | | | |
|---------------|---|------------------------------|
| ▪ 2024 - Now | Master of Statistics, Department of Applied Mathematics | National Dong Hwa University |
| ▪ 2021 - 2023 | Completed the Teacher Education Program | National Dong Hwa University |
| ▪ 2019 - 2023 | Bachelor of Statistics, Department of Applied Mathematics | National Dong Hwa University |

PROJECTS

- **Python Reimplementation of the R Package autoFRK**
<https://pypi.org/project/autoFRK/>
- **Hualien County 2024 Cat Cup Scratch Game and Animation Programming Competition** (Instructor)
- **Parking Simulation Model for Zhixue Station, Taiwan Railways** (Master's Course Project)
<https://yao-chih.netlify.app/en/parking-model-for-the-parking-lot-in-zhixue-station>
- **The Analysis of Characters in Dream of the Red Chamber** (Bachelor's Research Project)
<https://yao-chih.netlify.app/en/the-analysis-of-characters-in-dream-of-the-red-chamber>

INDIVIDUAL TRAITS

- Attention to Detail
- Logical Reasoning
- Responsibility
- Team Collaboration

EXPERTISE

- Mathematical Logic
- Data Processing
- Programming (Python & R)
- Student Education

KEEP LEARNING

- Machine Learning
- Time Series
- Spatial Models
- Missing Data Imputation