

Ping-Ju Hsieh

EDUCATION

Toulouse School of Economics, France

Sep. 2025 – Aug. 2027 (expected)

Master in Mathematics and Economic Decision

Selected Coursework: *Intermediate Econometrics, Probability and Statistics for Data Science, Advanced Analysis, Introduction to Convex Optimization for Machine Learning, Computational Data Science*

National Taiwan University, Taiwan

Sep. 2020 – Jan. 2025

B.A. in Economics, Minor in Mathematics

GPA: 3.95/4.3 with with Cross-disciplinary Specialty in Data Science and Social Analysis

Selected Coursework: *Intro. to Analysis, Real Analysis, Intro. to Linear Algebra, Mathematical Statistics, Optimization for Machine Learning, Data Structure and Algorithm, Statistical Learning and Deep Learning, Labor Economics, Experimental Economics*

Economics School of Erasmus University Rotterdam, The Netherlands

Aug. 2022 – Jun. 2023

Full-year Exchange Program with awarded Overseas Education Scholarship

Selected Coursework: *Finance, Financial Methods & Techniques, Corporate Finance, Monetary Economics, New Economic Thinking & Social Entrepreneurship*

RESEARCH EXPERIENCE

Bachelor Thesis: Wealth and Assortative Mating in Taiwanese Marriages

Jun. 2024 – Jan. 2025

Advisor: *Prof. Kuan-Ming Chen*

Abstract: This thesis investigates the assortative mating of wealth in Taiwanese marriages, focusing on how individual and parental wealth influence marriage selection and wealth distribution within households. Using administrative tax data, We examined the extent to which wealth-related characteristics shape marriage patterns. We found out the assortative matching on wealth is highly correlated with their parent's wealth. This intergenerational decision may come from East Asia cultural context, where traditional beliefs about social compatibility. This research helps us to understand more about marriage decision and the wealth mobility as a consequence.

Project: Individual Behavior in LUPI Game, An Experiment study from Lab and Field

Apr. 2024 – Jan. 2025

Research Assistant at NTU Econ, Supervisor: *Joseph Tao-Yi Wang*

- Assisted in the analysis of a large-scale field experiment in Taiwan involving over 1,500 participants per round, focusing on personal decision-making patterns in a winner-takes-all game.
- Researched agent-based learning models in game theory across multiple rounds.

WORK EXPERIENCE

Fire Prevention and Investigation Division, National Fire Agency, Taipei, Taiwan

Feb. 2025 – Jul. 2025

Substitute Service Conscript

- Obtained Emergency Medical Technician (EMT-1) certification and earned recognition for outstanding performance during basic training.

Actuarial Services Department, PricewaterhouseCoopers (PwC), Taipei, Taiwan

Sep. 2023 – Jun. 2024

Actuarial Analysis Intern

- Assisted in conducting annual actuarial audits for three of Taiwan's largest life insurance corporations, managing assets exceeding 150 billion USD.
- Pioneered the integration of Python into existing workflows, reduced the model complexity and reduced client's Alteryx model run time by 50%.

Electric Commercial Vehicle Strategy Office, China Motor Corporation, Taoyuan, Taiwan

Jun. 2023 – Aug. 2023

Automotive IoT Data Analysis Intern

- Improved IoT mileage prediction accuracy for electric garbage trucks from 90% to 98% using Multivariate Statistical Analysis and Statistical Learning techniques in R.
- Analyzed second-level driving data from 10,000+ trucks (1 TB dataset) to identify dangerous driving patterns and assess the feasibility of user-based insurance models.

SKILLS

Language: Mandarin (Native), English (Fluent, IELTS 7), French (A2)

Programming: Python, R, Stata, Matlab

Certifications: Exam P (Probability), Society of Actuaries

Honor: Interdisciplinarity Award of 2025 H!ckathon by École polytechnique & HEC Paris,

Finalist of Map the System competition 2021 by Oxford Saïd Business School

Interest: Climbing, Triathlon, Cooking