# Ming-Han Li

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## Research Interests

**Probability Theory, Microeconomics, Game Theory, Decision Theory, Mathematical Finance, Econometrics**

## Education

**National Chengchi University(NCCU)**                                    *Sep. 2018 - Jan. 2023*
**Bachelor of Science in Statistics**
**Bachelor of Arts in Economics**
**Mathematical Finance Program**                                               *Taipei, Taiwan*

- GPA: overall: **4.20/4.3, 3.97/4.0**
- Honors: <u>Academic Achievement Awards</u> * 4(Fall '19, Spring '20, Fall '21, Spring '21)
  <u>Taishan Academic Scholarship</u>(Spring '20)
- Related Courses:

  *Graduate Level:* Econometrics(I) (**A+**), Probability and Measure Theory (**A+**), Real Analysis (**A+**), Advanced Mathematical Statistics (**A-,A+**), Categorical Data Analysis(**A+**)

  *Undergraduate Level:* Microeconomics (**A+,A+**), Macroeconomics (**A+,A+**), Econometrics(II) (**A+**), Game Theory With Application in Finance (**A+**), An Introduction to Game Theory (**A+,A+**), Public Finance (**A+,A+**), Choice under Uncertainty (**A+**), Financial Derivatives (**A+**), Advanced Calculus (**A+,A**), Differential Equation (**A+**), Application of Differential Equation (**A+**), Complex Analysis (**A+**), Multivariate Analysis (**A+**), Business Analytics : Applications in SAS/R (**A+**)

## Projects

**Predicting Unemployment Rates during Covid-19**                  *Feb. 2021 - June 2021*
**Term Project for Econometrics(II)**                                          *Taipei, Taiwan*

- Aimed at investigating the impact of lockdown policies and Covid-19 death toll on the unemployment rate.
- Developed an AR and DID model using R to predict unemployment rates during Covid-19.
- Compared model performance using R-Squared and Bayesian Information Criterion (BIC) to select the optimal model.

**Predicting Bank Defaulting Clients with Logistic Regression**    *Feb. 2021 - June 2021*
**Class Project for Multivariate Analysis**                                    *Taipei, Taiwan*

- Built logistic regression models in SPSS to predict bank defaulting clients.
- improved the model significantly by cleaning the data and classifying the discrete variables.
- Evaluated model performance using R-squared, Hosmer and Lemeshow Test, and Wals test.

**Estimating GNP with a Regression Model**                           *Feb. 2020 - June 2020*
**Term Project for Linear Regression**                                        *Taipei, Taiwan*

- Developed a regression model in SAS to estimate Gross National Product (GNP) for various countries.
- Integrated and cleaned data from various websites with different formats.
- Conducted residual examination and lack of fit test to identify the best regression model.

## Experience

**Director of Teaching Sector**                                           *Sep. 2021 - June 2022*
**Mathematics Information Technology Club at NCCU**                     *Taipei, Taiwan*

- Delivered bi-weekly lectures on machine learning and statistics to a group of 20 students.
- Equipped each student with the ability to implement machine learning algorithms in Python and understand the concepts behind each algorithm.
- Independently created teaching materials.

### Event General Coordinator, NCCU Pyday
*Sep. 2019 - June 2022*
**National Chengchi University**
*Taipei, Taiwan*
- Organized and coordinated an annual event that invited python programmers to give applied lectures.
- Scheduled activities and invited speakers to ensure successful and engaging events.
- Successfully attracted 30-50 participants each year and ensured a high level of participant satisfaction.

### Intern on Machine Learning
*July 2020 - August 2020*
**Shanghai Far Eastern IT Co., Ltd**
- Built probabilistic and machine-learning models to predict potential defaulting clients.
- Created a GUI that enables users to quickly use the model for prediction with new data.

### Private Soldier
*Feb. 2023 - June 2023*
**ROC Army, 257 Brigade**
*Chiayi, Taiwan*
- Served as a grenadier.

## Extracurricular Activity

### Mathematics Information Technology Club
*Sep. 2019 - Jan. 2023*
**National Chengchi University**
*Taipei, Taiwan*
- Club that focuses on machine learning and Python.
- Vice Club Leader (Sep. 2019 - June 2020): Assisted the Club Leader in managing club affairs.
- Club Leader (Sep. 2020 - June 2021): Led the club and organized activities.
- Lab Manager (Sep. 2022 - Jan. 2023): Managed the operations of the club laboratory.

## Skills

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| **Programming and Software** | Python, SAS, R, SPSS, LaTex |
| **Languages** | Mandarin (native), English (fluent, TOEFL: 98 (Best Score: 101)) |