# **MIN-YI CHEN**

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#### **EDUCATION**

National Chengchi University

Taipei, Taiwan

**B.S.** in Statistics, Overall GPA: 4.24/4.30, Ranking: 4/58

Sep. 2020 - Jun. 2023

Central University of Finance and Economics

Beijing, China

International Business, Overall GPA: 81.74/100.00

Sep. 2018 - Jun. 2020

#### PUBLICATION AND WORKING PAPER

Ting-Li Chen, Elizabeth Chou, Min-Yi Chen and Fushing Hsieh (2022). Dynamic characteristics of Covid-19 daily infection rates across administrative districts and their age-groups in Taiwan. [Paper] [Shiny]

#### RESEARCH EXPERIENCE

# Institute of Statistical Science, Academia Sinica

Jun. 2022 - Present

Part-time Research Assistant

Employer Dr. Ting-Li Chen

- · Smoothing and visualizing data with R and RShiny for research in human behaviour behind Covid-19.
- · Study MCMC related papers under the guidance of Dr. Ting-Li Chen.

# Ministry of Science and Technology Research Project

Feb. 2022 - Feb. 2023

Undergraduate Researcher

Advisor Dr. Han-Ming Wu

Title: On the estimation of the weight parameters of the multi-SNE using the gradient descent [Code]

- · Designed an objective function for parameters estimation and prove the method converges at the rate of O(1/k).
- · Conducted experiments on synthetic and real data sets to show the effectiveness and robustness of my method.

#### WORKING EXPERIENCE

# Institute of Statistical Science, Academia Sinica

Feb. 2022 - May 2022

Data Science and Statistic Cooperative Intern

- · Used Statistical Method and Visualizing Skills to analyze real data from industry.
- · Analyzed and predicted the uptick in Covid cases in Taiwan with time series methods.

#### **PROJECTS**

# Is manifold learning reversible?

Jun.2022 - Present

https://ccminyi.github.io/manifold.html

Designed an experiment on reversibility in manifold learning with the Swiss Roll dataset.

I have some preliminary results but the thickness of the Swiss Roll is thinner than expected.

## League of Legends - Analysis and Prediction

Dec.2020 - Jan. 2021

https://github.com/CCMinyi/LOL-DS-Analysis-Prediction

· Analyzed winning factors and predicted match outcomes with Decision Tree, Naive Bayes, Ransom Forest, and SVM; Evaluated the performance with cross-validation, accuracy, AUC, and various metrics.

Developed interactive visualizing results via R and Shiny

· Voted the best project out of 12 groups in Data Science class.

# HONORS/AWARDS

Academic Excellence Award(top 5% of class in semester)
Taishan Academic Scholarship
Certificate of Merit in Calculus A General Examination
(Ranked seventh among all students in the university.)

May 2022 Oct 2021

Jan 2021

#### RELEVANT COURSES

Topics in Mathematical Statistics (PhD course) **Textbook**: Mathematical Statistics by Jun Shao

Real Analysis (midterm score: 90)

Textbook: Real Analysis Fourth Edition by H.L.Royden and P.M. Fitzpatrick

Probability and Measure theory

**Textbook**: The Theory of Probability by Santosh S. Venkatesh, Cambridge University Press

Bayesian decision analysis and Bayesian network

Image Processing

Nonparametric Function Estimation

**Mathematical Statistics** 

PyTorch and Machine Learning

Multivariate Analysis

Regression Analysis

Time Series Analysis

Data Science

## **LEADERSHIP**

# Google Developer Student Club, NCCU

Sep. 2020 - Jan. 2021

Team leader of recommender system group

· Led my team to build an item-based recommender system with matrix factorization and deep-learning methods.

Tennis Club, CUFE

Sep. 2019 - July. 2020

President

· Host a school-level tennis tournament and participate in over 100 divisions.