YU-HSUAN (SHIRLEY) CHOU

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SKILLS PROFILE

- Interests: Data Science, Research & Analysis, Social Science Research
- Skills: Data Analysis, Data Visualization, Machine Learning, Econometrics
- Technical Proficiencies: Python, R, C, C++, mySQL

EDUCATION

The University of Chicago, Chicago, IL

Master of Arts in Computational Social Science; Concentration: Economics, June 2023

National Taiwan University (NTU), Taipei, Taiwan

Bachelor of Social Science; Major: Economics, June 2020; Rank: 5/153

COURSEWORK

- Current Coursework: Thinking with Deep Learning for Complex Social & Cultural Data Analysis, Large-Scale Computing for the Social Sciences, Perspectives on Computational Modeling for Economics, Analysis in Rn, Introduction to Empirical Analysis, Machine Learning in Finance
- Economics Coursework: Microeconomics, Macroeconomics, Statistics, Econometrics, Game Theory and Information, Applied Microeconomics, Linear Algebra, Introduction to Mathematical Analysis
- Computer Science Coursework: Programming Design, Data Structure and Algorithm, Data Structure and Programming, Machine Learning, Discrete Math, Database Management

INTERNSHIP

Microsoft Taiwan, Taipei, Taiwan

<u>Technical Assistant, Microsoft Technology Center, July 2019 - June 2020</u>

- Demonstrated Azure data services to clients with web-crawling technique and Azure SQL database service
- Integrated Azure Machine Learning Services and IoT devices to predict air pollution; Built a complete data pipeline
- Taught a hands-on workshop of Azure Custom Vision service for 60+ people and built a web application to visualize object detection results with Custom Vision web API

RESEARCH EXPERIENCE

National Taiwan University (NTU), Taipei, Taiwan

Research Assistant (Full-time), Department of Social Work, Sept 2020 - July 2021

- Analyzed influence of long-term care policy on transportation usage patterns
- Utilized econometric and machine learning methods, including event study and triple difference-in-differences
- Summarized patient and service statistics and identified resource shortage in rural area with regression analysis
- Made process 6X faster by multi-processing data from Taiwan's National Health Insurance and Financial Ministry
- Combined and arranged data of 600,000+ people and made a document of the schema

Research Assistant, NTU Behavioral and Data Science Research Center, May 2018 - July 2018

- Analyzed effect of fake news on voter ideology during 2016 US Presidential Election with data from Facebook and classified them into pro-Trump and pro-Hilary
- Visualized how people in different states reacted to fake news using the percentage of the state that "liked" certain fake news pages combined with map tools in R, finding that some pro-Trump states indeed read more fake news

ACTIVITIES & HONORS

Instructor & Teaching Assistant, Coding & Co-working Club, Taipei, Taiwan, Sept 2017 - June 2021

- Organized 6 hands-on machine learning workshops within three months, coordinating with Google's Machine Learning Study Jam and Institute for Information Industry
- Instructed a 13-week Python programming study group and mentored 150+ students each semester
- Developed online course for 1,500 students and composed articles about Python, garnering 20,000+ views a month

Director, Academics Division, NTU Economics Student Association, Taipei, Taiwan, June 2017 - June 2018

- Elected to manage 20+ freshmen and sophomores for academic activities
- Invited 8 speakers for the career and graduate school series, attracting 150+ students to 4 major lectures

Honors: Academic Excellence Award (Fall 2017, Spring 2018, Spring 2019), Altruistic Award (Spring 2019)