SOPHIE JIARUI WANG

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EDUCATION

University of Chicago, Chicago, IL
MA, Computational Social Science, Expected June 2023
Thesis: People Prefer Algorithmic Aids More If They Know Humans Are Biased
Advisor: Berkeley J. Dietvorst, Associate Professor in Marketing, Booth School of Business

University of Colorado, Denver, CO
BA, Double Majors: Economics and History, 2021

London School of Economics and Political Science, London, England
Summer Program in Marketing, 2018

RESEARCH EXPERIENCE

University of Chicago Booth School of Business, Chicago, IL
Research Assistant to Sendhil Mullainathan, Center for Applied Artificial Intelligence, October 2021-Present

- **Natural Language Processing (NLP) Project**: **Misarticulation**
  - Collaborated on the project focused on people's psychological experiences of not having fully expressed or communicated their thoughts
  - Utilized word embedding techniques (GloVe and Word2Vec) for feature extraction
  - Implemented SVM regression and Logistic regression models to explore whether the occurrence of misarticulation is predictable through textual data
- **Deep Learning Project: Nightingale Open Science - ECG**
  - Assisted in the construction of a predictive model for sudden cardiac death utilizing 400,000+ samples of ECG waveforms from a Swedish health system
  - Proposed, implemented, and tested the Variational Autoencoder (VAE) model variants that introduce dropout layers and fully deconvolutional layers in PyTorch to improve the current model architecture
- **NLP Project: Upworthy**
  - Performed data cleaning and an exploratory data analysis using R; produced a report with informative visualizations and presented the findings to colleagues
  - Extracted sentence embeddings from news headlines and trained predictive models (RoBERTa, T5, and XLNet) on different outcome variables; evaluated and compared model performances

Tsinghua University, Beijing, China
Research Assistant, Department of Political Science, June 2021 – August 2021

- **Development of Urban Politics in China**
  - Conducted literature review on citizenship and urban politics; Made recommendations for prospective research topics
  - Managed and categorized the collection of relevant research papers in Zotero as part of the design of a new theoretical framework for Chinese urban politics
  - Developed English-language instructions for an interactive R tutorial on GitHub

University of Colorado, Denver, CO
Research Assistant, Department of Economics, May 2020 – July 2020

- **Community Effect and Social Networks of Corporate Directors**
  - Collected financial data from SEC filings of all Corporate Directors of S&P 500 companies
  - Designed a social network analysis on the relationship among S&P 500 Corporate Directors in Python
  - Evaluated key network measures and visualized a directed Force Atlas layout network graph using Gephi

Undergraduate Researcher, Department of History, September 2019 – June 2020

- **A Tale of Two Identities: Analyzing One Country Two Systems in the Age of Social Media**
  - Designed an independent research project examining nationalism in Hong Kong; Used text and sentiment analysis
  - Utilized Python to perform data scraping and compiled original primary datasets from Twitter and Weibo

PEER-REVIEWED PUBLICATIONS

Wang, Sophie Jiarui. (2020). "A Tale of Two Identities: Analyzing One Country Two Systems in the Age of Social Media." *Michigan Journal of Political Science, 2020 Fall,* 41-56. https://doi.org/10.5281/zenodo.6607781

PROFESSIONAL EXPERIENCE

8th International Conference on Computational Social Science (IC2S2), Chicago, IL
Administrator / Event Coordinator, June 2022 – July 2022
- Provided direct support for the organizers of 2022 IC2S2 (Sendhil Mullainathan, James Evans, Rochelle Terman, Luis Bettencourt) and worked collaboratively with the organizing team
- Drafted grant proposal for Sloan Foundation, managed donor relationships to secure conference funding support
- Assisted intensively in planning, scheduling, and coordination of the conference

U.N. Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand
Economic Affairs Intern, Information Communication Technology & Disaster Risk Reduction Division, July 2020 – December 2020
- Conducted research on the digital technology response of Asia-Pacific member states to COVID-19
- Developed a novel e-resilience index to measure digital performance across the regions and built the illustrative table for a UNESCAP working paper on e-resilience and pandemic recovery
- Produced data analytics on the affordability of internet in country groupings on sub-regional and income levels
- Wrote policy memos on: Policy Implications of Meaningful Connection; Harnessing blockchain for Sustainable Development: Prospects and Challenges; Mastering E-resilience Toolkit through Institutional Challenges; Understanding E-resilience for Pandemic Recovery in Asia and the Pacific (contributed to working paper of UNESCAP)

China Dragon Securities, Beijing, China
Finance Intern, Investment Banking Department July 2018 – August 2018
- Categorized information according to structure of prospectus; Composed a 24-page analytical report about listed companies using data derived from Wind Information.
- Analyzed direction of private equity placements and the merger and reorganization of enterprise events in the Chinese A-share market; Wrote case study analyzing five computational approaches of the scale of raised funds supplemented to working capital evaluating their accuracy.

TEACHING EXPERIENCE

University of Colorado, Department of Economics, Denver, CO
Teaching Assistant, August 2019 – May 2021
- Provided instructional support on the following courses: Introduction to Macroeconomics (Fall 2019, Spring 2021); Statistics and Computer Applications (Fall 2019, Fall 2020); Industrial Organization (Spring 2020); Game Theory Economic Applications (Spring 2021)
- Prepared timely feedback for students on their homework and tests and responded to their questions and concerns via Canvas and emails
- Liaised between students and instructors regarding teaching methods and course material issues, and identified creative and equitable solutions

HONORS AND AWARDS

MA Program in Computational Social Science Scholarship, University of Chicago, 2022
Phoenix Research Award Scholarship, University of Chicago, 2021
MA Thesis Research Grant, University of Chicago, 2021
Academic Excellence Award, University of Colorado, Denver, 2019

RESEARCH INTERESTS & SKILLS

- Research Interests: Judgment and Decision Making, Algorithmic Bias and Fairness, Consumer Behaviors,
- Research Skills:
  - Technical: R, STATA, Python
  - Application: Gephi, Git (GitHub), Markdown, MS Office Suite, Qualtrics, Wind, LATEX, SQL (Basic)
  - Languages: Mandarin Chinese (Native); Cantonese (Fluent); English (Fluent); French (Basic)