

Zhao Ma

MASTER STUDENT IN INFORMATICS
The Pennsylvania State University
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Education

The Pennsylvania State University

MASTER OF SCIENCE IN INFORMATICS, CONCENTRATION ON DATA SCIENCE

- **GPA:**3.72
- **Advisor:**Justin Silverman
- **Course:** Data Mining, Adversarial Machine Learning, Deep Learning, Compiler Construction

University Park, PA

August 20201 - current

Soochow University

BACHELOR OF SCIENCE IN PHYSICS

- **GPA:**3.4/4.0, top 15%
- **Advisor:**Chengjie Zhang

Suzhou, China

Sep. 2016 - June 2020

Experience

Justin Silverman's Lab in Penn State University

STUDENT RESEARCHER

- Research on error in high-dimensional models.
- Develop a novel method to evaluate the feasibility of an estimator, especially with gene expression data.

State College, US

Oct 2021 - Current

Quantum Information Laboratory of Soochow University

RESEARCH ASSISTANT

- Develop a method to detect quantum coherence theoretically.
- Conduct some experiment to verify the theory.
- The research result was published in Physical Review A.

Suzhou, China

July 2017 - May 2019

Suzhou Juhe Data

DATA ANALYST INTERN

- Collect data from various platforms and clean the data.
- Visualize data and analyze the effects of advertisement.
- Give advice on advertising strategy.

Suzhou, China

July 2019 - Sep. 2019

Projects

The Impact of Spontaneous Protection on the Spread of Epidemics

- Use the *Eguíluz and Zimmermann* model to simulate human dynamics.
- Simulate the evolution process of the epidemics where population evolves with different parameters and different cost-to-benefit ratios.
- Analyze the possible mechanisms that cause the features observed in the epidemic process.

Skills

Techniques Machine Learning, Mathematical Modeling, Python, C, MATLAB

Honors

- Advanced Mathematics Competition Second Prize
- Academic Excellence Award
- Outstanding Student Cadre

Publication

- Zhao Ma, Zhou Zhang, Yue Dai, Yuli Dong, and Chengjie Zhang, "Detecting and estimating coherence based on coherence witnesses", Phys. Rev. A 103, 012409, 2021. DOI:<https://doi.org/10.1103/PhysRevA.103.012409>