RUIYANG WU

School of Global Public Health, New York University 708 Broadway 7th Floor New York NY 10003 United States (520) 312-0382 ruiyang.wu@nyu.edu

https://ywwry66.github.io/personal page

EDUCATION

University of Arizona, Tucson, AZ

Aug 2022

Ph.D. in Mathematics Advisor: Ning Hao

University of Arizona, Tucson, AZ

Dec 2020

M.S. in Statistics and Data Science

Advisor: Ning Hao

Peking University, Beijing, China

Jul 2016

B.S. in Mathematics and Applied Mathematics

EMPLOYMENT

New York University, New York, NY

Jun 2022-Present

Postdoctoral Associate in Biostatistics

Advisor: Yang Feng

RESEARCH INTERESTS

- Theory and Methods: High-dimensional Statistics, Statistical Machine Learning (Discriminant Analysis, Transfer Learning, Decision Tree Learning, Change-point Detection).
- Applications: Electronic Health Record Data, Neuroimaging Data.

PUBLICATIONS

Published

- 1. Yifan He¹, **Ruiyang Wu**¹, Yong Zhou and Yang Feng (2023). DDAC-SpAM: A Distributed Algorithm for Fitting High-dimensional Sparse Additive Models with Feature Division and Decorrelation. *Journal of the American Statistical Association*. DOI: 10.1080/01621459.2023.2225743
- 2. **Ruiyang Wu** and Ning Hao (2022). Quadratic Discriminant Analysis by Projection. *Journal of Multivariate Analysis*, 190, 104987. DOI: 10.1016/j.jmva.2022.104987

Manuscripts

1. Ruiyang Wu and Ning Hao (2023+). Dimension Reduction for Quadratic Discriminant Analysis via

¹ Co-first authors.

- Supervised Principal Component Analysis. Manuscript available upon request.
- 2. Wenbo Ouyang, **Ruiyang Wu**, Ning Hao and Hao Helen Zhang (2023+). Dynamic Supervised Principal Component Analysis for Classification. *Submitted*.

Software

- QDAP: Quadratic Discriminant Analysis by Projection. Available on *GitHub*.
- **QDAPCA:** Dimension Reduction for Quadratic Discriminant Analysis via Supervised Principal Component Analysis. Available on *GitHub*.

TEACHING

Instructor at University of Arizona

• Math 112, College Algebra

Spring 2022

• Math 112, College Algebra

Fall 2021

• PhD Qualifying Exam Review, Real Analysis

Summer 2020

Teaching Assistant at University of Arizona

• Math 107, Exploring and Understanding Data

Fall 2017 & Spring 2018

• Math 112, College Algebra

Spring 2017

• Math 310, Applied Linear Algebra

Fall 2016

SERVICES

• Referee Service: Journal of the American Statistical Association; Computational Statistics & Data Analysis.

PRESENTATIONS

- "Quadratic Discriminant Analysis by Projection", TRIPODS 2nd Southwest Summer Conference, Oracle, AZ, May 2019
- "Quadratic Discriminant Analysis by Projection", ICSA 2018 Applied Statistics Symposium, New Brunswick, NJ, Jun 2018

AWARDS

•	Galileo Circle Scholarship ² , University of Arizona	Apr 2021
•	Data Science Academy Fellowship, University of Arizona	Nov 2020
•	Galileo Circle Scholarship ² , University of Arizona	Apr 2019

SKILLS

- Computer Programming: C, R, MATLAB, Emacs Lisp
- Languages: English, Chinese
- Interests: Violin, Chess, Hiking, Contributing to Open Source

² The Galileo Circle awards scholarships to exceptional students at College of Science, University of Arizona.