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 2016-Aug 2022
Ph.D. in Mathematics
Advisor: Ning Hao

University of Arizona, Tucson, AZ — Aug 2020-Dec 2020
M.S. in Statistics and Data Science
Advisor: Ning Hao

Peking University, Beijing, China — Sept 2012-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 He, **Ruiyang Wu,** 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 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: 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[1], University of Arizona — Apr 2021
- Data Science Academy Fellowship, University of Arizona — Nov 2020
- Galileo Circle Scholarship, University of Arizona — Apr 2019

SKILLS

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

[1] The Galileo Circle awards scholarships to exceptional undergraduate and graduate students at College of Science, University of Arizona.