

# 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](mailto:ruiyang.wu@nyu.edu)  
[https://ywwry66.github.io/personal\\_page](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*.
2. **Ruiyang Wu** and Ning Hao (2022). Quadratic Discriminant Analysis by Projection. *Journal of Multivariate Analysis*, 190, 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<sup>1</sup>, 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

---

<sup>1</sup> The Galileo Circle awards scholarships to exceptional undergraduate and graduate students at College of Science, University of Arizona.