

# Sijia Liao

Graduate Student

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Statistics and Data Science Program,

University of Arizona,

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## Education

### Graduate (PhD)

Aug. 2020 - Current

Statistics and Data Science Program, University of Arizona

Research Interest: Nonparametric Statistics Method

Advisor: Hao Helen Zhang

### Graduate (MS)

Aug. 2017 - Jul. 2020

School of Mathematics, Sun Yat-Sen University

Master of Science in Probability and Mathematical Statistics

Advisor: Zhengan Yao

### Undergraduate (BS)

Aug. 2013 - Jul. 2017

School of Mathematics, Sun Yat-Sen University

Bachelor of Science in Mathematics and Applied Mathematics

## Teaching Experience

Fall 2021

Teaching Assistant for Math 112, University of Arizona

Fall 2018

Teaching Assistant for Mathematical Experiments and Mathematical Software,  
Sun Yet-sen University

Spring 2018

Subject Counsellor in Counselling and Development Centre,  
Sun Yet-sen University

## Research Experience

### Past Project

*Parallel Algorithms for Large-Sized Graphs (Dec. 2018 - Jul. 2020)*

- Develop parallel algorithms to analyze the properties of large-sized graphs, including shortest path, connected components, graph partition and PageRank.

- Responsible for using mathematical knowledges to analysis and prove the feasibility and performance of the developed parallel algorithms of connected components and PageRank.

### Graduate Thesis

#### *Research on an Exemplar-based Image Inpainting Method (Sep. 2019 - May 2020)*

- Developed an exemplar-based image inpainting method, used MATLAB.

### Undergraduate Thesis

#### *Mathematical methods in Image Processing (Sep. 2016 - May 2017)*

- A review, but also studied and improved a partial differential equation based method in image inpainting, used MATLAB.

## Award and Honor

October 2019	University Excellent Graduate Student Award & First-Class Scholarship, Sun Yet-sen University
October 2018	University Excellent Graduate Student Award & First-Class Scholarship, Sun Yet-sen University
October 2017	University Excellent Graduate Student Award & First-Class Scholarship, Sun Yet-sen University
December 2016	University Excellent Student Award & Sun Yat-sen Scholarship, Sun Yet-sen University