
YUWEI BAO

New Orleans, LA 70118 ♦ ybao2@tulane.edu

EDUCATION

Doctor of Philosophy: Mathematics (Statistics), Expected in 2025

Tulane University - New Orleans, Louisiana

- GPA: 3.83/4.00

Bachelor of Science (Honors): Mathematics, Computer Science, 05/2020

McMurry University - Abilene, Texas

- Magna Cum Laude
- GPA: 3.77/4.00 (Math GPA: 4.00/4.00 and Computer Science GPA: 3.81/4.00)
- Awarded Ginny Carlson Memorial Award as Outstanding Female Graduating Senior of Class of 2020
- The Dean's List: 2016-2020
- Honor Thesis: Simulation using regression and noise
- Member of Texas Iota Chapter of Kappa Mu Epsilon, National Mathematics Honor Society
- Member of Omicron Delta Chapter of Alpha Phi Omega, National Service Fraternity

EXPERIENCES

Research Assistant, 05/2022 to Current

Tulane University – New Orleans, Louisiana

- Construction of coalescent model in a Bayesian phylogenetics framework
- Drosophila Bulk DNA data analysis
- Mentors: Dr. Xiang Ji and Dr. Wu-Min Deng

Teaching Assistant, 08/2020 to 08/2022

Tulane University – New Orleans, Louisiana

- Assisted with undergraduate Long Calculus I, Calculus I & II, and Statistics.
- Taught weekly recitations to supplement professor's presentations.
- Hosted office hours to answer students' questions.
- Wrote quiz rubrics, graded quizzes and exams.

Student Writer, 01/2018 to 05/2020

War Hawks Herald Newspaper, McMurry University – Abilene, Texas

- Published thirty articles in McMurry War Hawks Herald school newspaper covering events students are involved. Some articles can be accessed through: <https://blogs.mcm.edu/herald/>

Student Math Tutor-CRLA Level I Certified Tutor, 10/2017 to 05/2020

McMurry University – Abilene, Texas

- Tutored Intermediate Algebra, College Algebra, Pre-Calculus, Calculus I, Calculus II, Linear Algebra, Statistics, Nursing Chemistry I, and some intro level Computer Science classes.

Summer Undergraduate Researcher, 06/2019 to 07/2019 and 07/2018 - 08/2018

McMurry University – Abilene, Texas

- Did computational chemistry research which focuses on docking studies and analysis over HDAC inhibitors as anti-cancer therapeutic.
- Mentors: Dr. Paul Pyenta & Dr. Hyunshun Shin

AWARDS

Tuition Scholarship, Summer Institute in Statistical Genetics (SISG), 07/2023

Travel Award, Summer Institute in Statistical Genetics (SISG), 07/2023

Travel Award, Evolution Meeting, 06/2023

Travel Award, Tulane Graduate Studies Student Association (GSSA), 06/2023

Travel Scholarship, Graduate Student Mathematical Modeling Camp (GSSMMC), 06/2021

Travel Scholarship, Mathematical Problems in Industry (MPI), 06/2021

Summer Research Fund, Tulane University Mathematics Department, 06/2021, 06/2022

CONFERENCE PRESENTATIONS

Coalescent Bayesian tree prior, Evolution Meeting, Albuquerque, New Mexico, 06/2023

Smooth Skygrid: Bayesian coalescent-based inference of population dynamics, Scientific Computing Around Louisiana (SCALA), New Orleans, Louisiana, 03/2023

Bayesian coalescent-based model for inferring population dynamics, Math for All, New Orleans, Louisiana, 02/2023

Smooth coalescent prior for scalable Bayesian phylogenetic demographic inference, Louisiana American Statistical Association Chapter Meeting (LA ASA), Online, 11/2022