#### **EDUCATION**

Rutgers University, New Brunswick, NJ

September 2023 – Present

Bachelor of Science, Computer Science and Mathematics

### **EXPERIENCE**

## Research Assistant

September 2024 – Present

Zhu Group, Rutgers University

New Brunswick, NJ

GPA: 3.964

#### Research Assistant

June 2022 - Present

Xing Lab of Genomics, Rutgers University

New Brunswick, NJ

- Develop novel genome analysis pipelines
- Visualize and summarize results through writing and presentation
- Develop and maintain lab websites (Xing Lab and TIC Genetics Study)

## **PUBLICATIONS**

- Zeng, W., Xu, J., <u>Liu, J.</u>, Marin, D., Treff, N., Xing, J. (2024 October) Identification and prioritization of candidate genes associated with an euploidy using PGT-A data. MABC 2024, Philadelphia, PA [Conference]
- 2. <u>Liu, J.</u>, Xu, M., Xing, J. (2024 October) Systematic assessment of active module identification algorithms. MABC 2024, Philadelphia, PA [Conference]
- 3. Biswas, L., Tyc, K., Aboelenain, M., Sun, S., Dundović, I., Vukušić, K, <u>Liu, J.</u>, Guo, V., Xu, M., Scott, R., Tao, X., Tolić, I., Xing, J., Schindler, K. (2024 July) Maternal genetic variants in kinesin motor domains prematurely increase egg aneuploidy, *Proceedings of the National Academy of Sciences*. [Journal] [Featured in Rutgers Today]
- Liu, J., Xu, M., Schindler, K., Xing, J. (2023 October) Using PAPER to identify active modules in an aneuploidy dataset. MABC 2023, Philadelphia, PA. [Conference]
- 5. <u>Liu, J., Sun, S., Xing, J. (2022 October)</u> Predicting embryonic aneuploidy rate and identifying candidate genes in IVF patients using synonymous variants. MABC 2022, Philadelphia, PA. [Conference]

# **TALKS**

Systematic assessment of active module identification algorithms.

Research in Progress Seminar, Department of Genetics, Rutgers University (January 2025).

The Weierstrass factorization theorem.

Directed Reading Program, Department of Mathematics, Rutgers University (December 2024).

Predicting embryonic aneuploidy rate and identifying candidate genes in IVF patients using synonymous variants.

Lightning Talk, MABC 2022 (October 2022).

### **AWARDS**

The David and Dorothy Bernstein Scholarship for Summer Research

Rutgers University - School of Arts & Sciences (2024).

### Trainee Award

MidAtlantic Bioinformatics Conference (2022).

 ${\bf SKILLS} \qquad \qquad {\it Programming languages: Python, UNIX Shell, R, Java, C++}$ 

Presentation and written communication

Project design and management Languages: Mandarin (fluent).