Qi Zeng

Education

Georgia Institute of Technology Aug. 2020 – May 2023

Bachelor of Science in Mathematics (Probability and Statistics). GPA 3.86/4.0 Atlanta, GA
Bachelor of Science in Computer Science (Intelligence and People). GPA 3.86/4.0

University of Florida Aug. 2019 – Aug. 2020

Bachelor of Science in Mathematics. GPA 3.86/4.0 Gainesville, FL
Transferred to Georgia Institute of Technology in August 2020.

Research Experience

Competitive Physics Informed Neural Network Sep. 2021 - Present

Georgia Institute of Technology Atlanta, GA

- Working with Professor Florian Schäfer and Professor Spencer Bryngelson to incorporate a generator-discriminator framework into Physics Informed Neural Networks to solve partial differential equations for higher accuracy.
- Wrote a first-author paper titled *Competitive Physics Informed Networks*, which has been accepted for the International Conference on Learning Representations 2023.

Other Experiences

Application Development Intern May. 2022 – Aug. 2022

ADP, LLC. Alpharetta, GA

- Assisted full-time developers to decouple previously dependent projects to improve code stability and development efficiency.
- Developed multiple Jersey RESTful web service APIs in Java, integrated the APIs into the existing code base.

Student Assistant Oct. 2021 – Present

Georgia Institute of Technology Atlanta, GA

- Assisted James Anderson to evaluate students' performance in the Applied Combinatorics class.
- Assisted Professor Anton Leykin to evaluate students' performance in the Second Course to Linear Algebra class.
- Assisted Dr. Gregory Mayer with office hours and provide support for students in the Multivariable Calculus class.

Google Summer of Code 2021 Participant Jun. 2021 – Aug. 2021

Google and Integrated Ocean Observing System Remote

- Worked with Integrated Ocean Observing System to develop a translation tool to translate ERDDAP (an opensource data server application used by oceanographic communities) to enhance data accessibility for oceanographic science communities around the globe.
- Detailed description at summerofcode.withgoogle.com/projects/#5625952861683712.

Learning Assistant Jan. 2020 – May 2020

University of Florida Gainesville, FL

- Volunteered to assisted Dr. Stephen Adams in the Calculus I lecutres.
- Supervised and mentored students to improve their understanding on calculus concepts.

Research Presentations

Zeng, Q., Kothari, Y., Bryngelson, S. H., & Schäfer, F. (2022). Competitive physics informed networks. arXiv. http://arxiv.org/abs/2204.11144.

- The paper has been accepted for the International Conference on Learning Representations 2023.
- Delivered an oral presentation at 2022 Georgia Scientific Computing Symposium.
- Delivered an oral presentation at 16th Annual Spring Undergraduate Research Symposium at Georgia Tech.
- Presented a poster at the International Conference on Learning Representations 2022 workshop on Gamification and Multiagent Solution.

Awards & Honors

Faculty Honors
Georgia Institute of Technology   Spring 2021, Spring 2022, Fall 2022

Dean's List
Georgia Institute of Technology   Fall 2020, Fall 2021

President's Honor Roll
University of Florida   Fall 2019, Spring 2020

Specialized Skills

Programming Languages: Python, Java, SQL, C/C++, MATLAB
Languages Spoken: English (Fluent), Chinese (Native Speaker)