

Gabriel Mancino-Ball

Applied Mathematician

Passionate about the blending of optimization, machine learning, and software development to create solutions to business problems grounded in first principles

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Experience

Research Assistant

 Rensselaer Polytechnic Institute  Spring 2020–Present  Troy, NY

- Develop and analyze algorithms to be used in distributed computing environments to solve consensus optimization problems
- Implement state-of-the-art algorithms from top-tier research papers to simulate distributed computing

R&D Data Science Intern

 3M - Corporate Research Systems Lab  Summer 2019  Minneapolis, MN

- Developed and deployed software using Amazon AWS to assist additive manufacturing production lab in computer vision tasks
- Created a data augmentation algorithm to generate training data for a custom trained object detection neural network

Teaching Assistant

 Rensselaer Polytechnic Institute  Fall 2018 – Fall 2019  Troy, NY

- Achieved cumulative student approval rating of 4.55/5.0
- Recitation leader responsible for 120+ students for calculus I (F '19) and multi-variable calculus (F '18, S '19)

Education

Ph.D. in Mathematics

 Rensselaer Polytechnic Institute  Expected 2023  Troy, NY

- Passed written preliminary exam with distinction (S '19) and passed oral qualifying exam (S '20)
- RPI Chapter Society for Industrial and Applied Mathematics Vice President (F '18–S '19)

B.S. in Mathematics

 Winona State University  2018  Winona, MN

Relevant Coursework

- **Mathematics:** Computational Optimization, Linear Programming, Geometric Learning
- **Computer Science:** Large Scale Matrix Computations and Machine Learning, Optimization for ML

Computer Skills

- **Strong:** Python, R, MATLAB, Latex
- **Familiar:** HTML, CSS, Java