

Alexander Jay Brower

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Education

- University of Georgia** Aug 2022 - May 2027
(Expected)
- **Advisor:** Weiwei Hu
 - GPA: 3.89/4.0
- University of South Florida, BA in Pure Mathematics** Aug 2019 – May 2022
- GPA: 3.9/4.0

Research Interests

- Optimal control of partial differential equations
- Control of data exchange via boundaries
- Mathematical control theory of network-transport systems
- Numerical approximation to solutions of control problems

Conferences/Papers

- Invited Talk at SIAM Conference on Control and Its Applications** July 2025
Boundary Control for Optimal Data Exchange, Estimation and Control of PDE systems Minisymposium
- Boundary Control for Optimal Data Exchange** Nov 2024
Daniel Owusu Adu, *Alexander Brower*, Weiwei Hu, Zhaiming Shen
Submitted
- Optimal Time Scheduling** *In Progress*
Daniel Owusu Adu, *Alexander Brower*, Weiwei Hu, Haoning Wu

Teaching/Service

- University of Georgia
- **MATH1113 - Precalculus x2**, *Instructor of Record*, Spring 2025
 - **MATH1113 - Precalculus x2**, *Instructor of Record*, Fall 2024
 - **MATH2250 - Calculus I for Science and Engineering**, *Instructor of Record*, Spring 2024
 - **MATH1113 - Precalculus**, *Instructor of Record*, Fall 2023
 - **MATH4700 - Qualitative ODES**, *Grader*, Fall 2023
 - **MATH4600 - Probability**, *Grader*, Spring 2023
 - **MATH3300 - Applied Linear Algebra**, *Grader*, Fall 2022
 - *Tutor for Math Study Hall*, Fall 2022/Spring 2023/Spring 2024
- University of South Florida
- **MAA4211 - Intermediate Analysis 1**, *Grader*, Spring 2022
 - *Tutor in Academic Success Center*, Fall 2021/Spring 2022

Programming

Languages: MATLAB, Maple