

J. Haden Boone

Cell: 678-767-2055

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ORCID: 0000-0003-0781-1140

RESEARCH INTERESTS

Game Theory, Large-Scale Optimization, Simulation, Network Security & Resiliency, Distribution Network Design

EDUCATION

Georgia Institute of Technology, Atlanta, GA

August 2021 – Present

- *Ph.D. Student in Operations Research, GPA 4.0/4.0*

Georgia Institute of Technology, Atlanta, GA

August 2017 – May 2021

- *Bachelor of Science in Industrial Engineering with a Concentration in Operations Research, GPA 4.0/4.0*

ACADEMIC PUBLICATIONS

“Infrastructure Inspection with Imperfect Detection Technology”

J. Haden Boone and Mathieu Dahan

Submitted to Naval Research and Logistics, June 2024.

In Proceedings of the 2023 American Control Conference, San Diego, CA, May 2023.

Presented at the INFORMS Annual Meeting, Phoenix, AZ, October 2023.

Presented at the INFORMS Annual Meeting, Indianapolis, IN, October 2022.

“SQSTS: A Sequential Procedure for Estimating Steady-State Quantiles Using Standardized Time Series”

Athanasios Lolos, J. Haden Boone, Christos Alexopoulos, David Goldsman, Kemal Dinçer-Digeç, Anup Mokashi, and James R. Wilson
Accepted into the Journal of Simulation, June 2024.

“A Sequential Method for Estimating Steady-state Quantiles Using Standardized Time Series”

Athanasios Lolos, J. Haden Boone, Christos Alexopoulos, David Goldsman, Kemal Dinçer-Digeç, Anup Mokashi, and James R. Wilson.
In Proceedings of the 2022 Winter Simulation Conference, Singapore, December 2022.

“Steady-state Quantile Estimation Using Standardized Time Series”

Christos Alexopoulos, J. Haden Boone, David Goldsman, Athanasios Lolos, Kemal Dinçer-Digeç, and James R. Wilson.
In Proceedings of the 2020 Winter Simulation Conference, December 2020.

FELLOWSHIPS AND AWARDS

National Science Foundation Graduate Research Fellowship Program

April 2023

Herbert P. Haley Fellowship

August 2023

Ronald J. & Carol T. Beerman President’s Fellowship

August 2021

Georgia Tech President’s Fellowship

August 2021

Georgia Tech IP Hackathon Winner

March 2021

- *Created a scalable business case using Georgia Tech IP for the use of sustainable biological materials in carbon fiber manufacturing for the automotive industry*

President’s Undergraduate Research Salary Award

January 2021

GRADUATE RESEARCH

Military Logistics in Contested Environments

August 2022 – Present

- *Assisted in development of a model that maximizes capabilities of military operational plans subject to logistical constraints*
- *Developed and tested heuristics to facilitate solving extremely large problem instances*
- *Designing a secondary model to ensure the resiliency of logistical plans under threat of adversarial disruption*
- *Developed a simulation tool that builds realistic networks to evaluate performance capabilities of the model*

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Network Inspection with Imperfect Detection of Components

August 2021 – Present

- Contributed novel insight and analytical proofs to enhance parametric decision making in networks of interest to critical infrastructure and military operations

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

Graduate Student Government Association

Graduate Student Body President

April 2023 – April 2024

- Elected to serve as the official spokesperson for over 26,000 graduate students at Georgia Tech
- Manage an executive cabinet of 16 members, each overseeing different divisions of campus operations
- Successfully advocated for Institute foundation funding for high-touch graduate student programs, including:
 - \$400k for health insurance subsidies for graduate students on full fellowships
 - \$40k for a pilot program implementing a tutoring platform for introductory graduate courses
 - \$12k for childcare subsidies for graduate student parents
- Designed an entirely new financial allocation model that removes subjective decision-making for a \$2.5M fund
 - Built a mathematical model to instate a progressive bracket system on budget requests that insulates small requesters from exorbitant budget cuts
 - Added an “Allowable Cost List” with item-specific caps to provide flexibility in oversight but prevent insolvency
 - Passed the new proposed policy through bicameral student governance with over 85% of student support
 - Mentored a GT ISyE student senior design team to evaluate the newly proposed system
- Oversaw the planning of the annual campus-wide Career, Research, and Innovation Development Conference
 - Disbursed over \$40k in travel awards to students presenting research
 - Hosted 30 employers to attend a networking brunch with graduate students
 - Coordinated 4 panel sessions with expert speakers on topics of interest to graduate students
- Raised \$65k from campus partners to put on a formal celebratory event for graduate students
- Met with congresspeople in D.C. to advocate for increased science and tech funding alongside other initiatives
- Created a training program that helps clarify situations that arise from the research advisor-advisee relationship
- Realized two new special governance committees that oversee student concerns from International and Online students
- Heavily involved in administrative conversations involving Institute strategy and operations affecting students

Vice President of Government Affairs

August 2022 – April 2023

- Interfaced with government officials at the federal, state, and local levels to advocate for graduate student needs

Georgia Tech Student Ambassadors

Vice President of External Affairs

April 2020 – April 2022

- Served as a representative of the Georgia Tech student body to alumni and important guests
- Responsible for communication and coordination between student representatives and event lead

Fulton County Department of Registration and Elections

Poll Manager – Precinct 02L2/03I

August 2021 – Present

- Manage, run, and recruit for a fully GT-student run polling precinct in Fulton County
- Advocate for early voting locations on campus, increasing voter turnout among college students

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UNDERGRADUATE RESEARCH

Steady State Quantile Estimation

January 2020 – December 2022

- Using modern simulation techniques to develop data-conservative algorithms for quantile estimation
- Built application in Java using creative methods to estimate percentiles using standardized time series
- Received PURA, a competitive undergraduate research award, for work in first year of project

TEACHING EXPERIENCE

Teaching Assistant

May 2020 – May 2021

ISYE 4045: Advanced Simulation, ISYE 3044: Simulation Analysis and Design

- Responsible for grading of assignments and holding of office hours for a class of 60+ students
- Received positive reviews from students and an average overall score of 4.9/5.0 on end of course opinion survey

INDUSTRY EXPERIENCE

Cox Communications, Atlanta, GA

August – December 2018, May – July 2019 (8 months)

Devices & Networking Operations Co-op

- Optimized processes involved in lifecycles of set-top box and cable modem supply chains by leading projects that ultimately saved the company over \$500,000 in annual operating costs
- Used analytical tools to identify problem areas in device hardware/software versions and led mitigation efforts