

Madelyn Gatchel

gatchel@umich.edu • madelyngatchel.com • Ann Arbor, MI

EDUCATION

University of Michigan

Ann Arbor, MI

Ph.D. in Computer Science & Engineering

September 2021 - Present

- Advisor: Professor Michael P. Wellman, Strategic Reasoning Group
- Advanced to candidacy in Spring 2023

M.S. in Computer Science & Engineering

August 2023

- Coursework (GPA: 4.0): Advanced Game Theory, Machine Learning, AI Foundations, Advanced AI, Reinforcement Learning, Distributed Systems

Davidson College

Davidson, NC

B.S. in Computer Science (High Honors) and Mathematics, Magna Cum Laude

May 2021

- GPA: 3.990; Computer Science Major GPA: 4.000; Mathematics Major GPA: 3.970
- Honor Societies: Phi Beta Kappa, Omicron Delta Kappa
- Honors Thesis: "Variable-Player Learning for Simulation-Based Games," advised by Professor Bryce Wiedenbeck

RESEARCH EXPERIENCE

Division of Computer Science & Engineering, University of Michigan

Ann Arbor, MI

Graduate Student Research Assistant – Strategic Reasoning Group

August 2021 - Present

Department of Mathematics & Computer Science, Davidson College

Davidson, NC

Undergraduate Research Assistant

May 2020 - August 2021

Department of Computer Science, Brown University

Providence, RI

DREU Undergraduate Research Assistant for Prof. R. Iris Bahar

May 2019 - August 2019

PUBLICATIONS

1. Madelyn Gatchel and Bryce Wiedenbeck. Learning Parameterized Families of Games. In *22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, May 2023. 1044–1052.
2. Madelyn Gatchel. Analyzing Games with a Variable Number of Players (Extended Abstract). In *35th AAAI Conference on Artificial Intelligence: Student Papers and Demonstrations*, May 2021. Vol. 35, No. 18, 15960-15961.

DEPARTMENT LEADERSHIP

CSE PhD Admissions Committee, University of Michigan

Ann Arbor, MI

CSEG Student Representative

December 2021 - June 2024

Applicant Recruitment & Support (Fall):

- Created and organized a program which paired current Ph.D. students with (16, 28) Ph.D. applicants from diverse backgrounds to provide feedback on their Statements of Purpose (2023, 2024)
- Served as a UM CSE Explore Graduate Studies current student panelist (2022, 2023) and moderator (2023)
- Volunteered for the UM CSE booth at Tapia conference (2023) and UM CoE EMERGE program (2022)

Admissions Committee Efforts:

- Provided input from a student perspective at the weekly CSE PhD admissions committee meetings
- Trained new CSEG officers: Recruitment Chair, Admissions-Recruitment Liaison (AY 2023-2024)
- Recruited and helped train ~50 total Ph.D. student volunteers to evaluate AI applications (Dec 2022, Dec 2023)
- Conducted thorough evaluations of ~25 total AI applications for 2021-2022 and 2022-2023 application cycles
- Evaluated ~20 AI applications for potential fellowship nomination during 2023-2024 application cycle

Recruitment Efforts (Winter):

- Assisted the Admissions Committee and the Graduate Programs Office in planning the virtual and in-person recruitment weekends, and volunteered ~20 hours each year for various sessions of the visits (2022-2024)
- Recruited, scheduled, and managed ~50 PhD student volunteers each year for virtual and in-person visits (2023, 2024)

CSE Division Chair Search Committee, University of Michigan**Ann Arbor, MI***Student Representative**July 2023 - December 2023*

- Attended committee meetings and helped conduct first- and second-round interviews
- Organized meetings for graduate students to meet with each second-round chair candidate
- Volunteered over 50 hours for this position

AI Lab, University of Michigan**Ann Arbor, MI***AI Tea Co-Coordinator**December 2021 - May 2023*

- Planned and facilitated monthly AI discussions with co-coordinator for 25+ AI lab graduate students and faculty

Women in Computer Science (WiCS), Davidson College**Davidson, NC***Vice President**August 2019 - May 2021*

- Assisted with organizing weekly meetings and coordinated event logistics with outside speakers and groups
- Mentored first-year and sophomore women and non-binary students exploring computer science

TEACHING EXPERIENCE

Division of Computer Science & Engineering, University of Michigan**Ann Arbor, MI***Primary Instructor**Fall 2024*

- EECS 110 Discover Computer Science

*Graduate Student Instructor**January 2024 - May 2024*

- EECS 592 Artificial Intelligence Foundations

Department of Mathematics & Computer Science, Davidson College**Davidson, NC***Computer Science Assistant Teacher**August 2019 - May 2021*

- CSC 121 Programming and Problem Solving (Python): Fall 2019, Spring 2020, Fall 2020 (60-90 students per semester)
- CSC/MAT 220 Discrete Structures (introductory proofs course): Spring 2021 (25 students)
- Led 2-3 weekly sessions for 5-25 students to review coursework and class concepts
- Spring 2020: Taught three lectures (string manipulation, return statements, file I/O) in professor's absence
- Fall 2020: Reformatted quiz handouts, skeleton files, solutions, and autograders to align with restructured course

*Computer Science Grader**August 2018 - May 2019*

- CSC 121 Programming and Problem Solving (Python): Fall 2018, Spring 2019 (20-40 students per semester)

HONORS & AWARDS

- CSE HACKS Spirit Award (Spring 2024)
- CRA-WP Grad Cohort for Women Scholar (Spring 2022)
- AAAI-21 Undergraduate Consortium Scholar (Spring 2021)
- Davidson College Senior Computer Science Award (Spring 2021)
- Davidson College William Gillespie McGavock Mathematics Award (Spring 2021)
- CRA-WP Grace Hopper Celebration Research Scholar (Fall 2019)

PROFESSIONAL SERVICE & VOLUNTEERING

- U7+ Alliance at NEXT Milan Forum in Italy – U-M Student Delegate (March 2024)
- CSE DEI Discussions – Presenter and PhD Recruitment Discussion Moderator (October 2023)
- UM Provost Advisory Committee Meeting – Student Panelist (September 2023)
- AAMAS-23 student volunteer (May 2023)
- UM Computing CARES Failing Forward – Student Panelist (February 2023)
- EECS 601: Introduction to CSE Graduate Research – Student Panelist (November 2022)
- EECS 110 Discover Computer Science – Mentor (Winter 2022, Fall 2022)
- Student interviewer for UM College of Engineering Director of Graduate Initiatives position (April 2022)