

Makayla Moster, Ph.D.

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Assistant Professor

Department of Computer Science
University of North Carolina Wilmington

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Education

Ph.D. in Computer Science

Clemson University May 2025
Clemson, SC
Dissertation: "Learning Through Online Participation: From Breakout Rooms to Discord"

Graduate Certificate, Engineering & Science Education December 2022
Clemson University Clemson, SC

M.S. in Computer Science May 2021
Clemson University Clemson, SC

B.S. Honors in Computer Science, Digital Arts concentration May 2019
University of North Carolina Wilmington Wilmington, NC
Magna Cum Laude GPA: 3.886
Thesis: "Conforming Realistic, Procedural Tree Models to User-Drawn Shapes"

Publications

[†]paper presented [‡]poster presented *co-first authorship

Journal Articles

2023 J.1[†] ***Moster, M.**, *Kokinda, E., Rodeghero, P., McNeese, N. "Both Sides of the Story: Changing the "Pre-existing Culture of Dread" Surrounding Student Teamwork in Breakout Rooms", in Proc. of the ACM on Human Computer Interaction, 7, **CSCW1**, Article 30 (April 2023), 33 pages.

Peer-Reviewed Conference Papers

2026 C.11 **Moster, M.**, Kokinda, E., Boyer, D. M., Rodeghero, P. "Leveling Up: Experiences and Evidence-driven Upgrades to a Game Coding Camp for Autistic High School Students", to be in Proc. of the 48th IEEE/ACM International Conference on Software Engineering - Software Engineering Education and Training Track (ICSE SEET '26), Rio de Janeiro, Brazil, April 12–18, 2026.

2024 C.10 Kokinda, E., **Moster, M.**, Rodeghero, P., Boyer, D. M. "Informal Learning Opportunities - Neurodiversity, Self-Efficacy, and Motivation for Programming Interest", presented at the 16th International Conference on Computer Supported Education (**CSEDU '24**), Angers, France, May 2-4, 2024.

- C.9[‡] **Moster, M.** & Boyer, D. M. “WIP: Exploring how an Unofficial Discord Server Supports Undergraduate Learning in Computer Science”, presented at 2024 ASEE Annual Conference & Exposition, Portland, Oregon, USA, June 23-26, 2024.
- C.8[†] Kokinda, E., **Moster, M.**, Boyer, D. M. “Compiling Resilience: A Study on First-Generation Women Pursuing Computing Degrees”, presented at 2024 ASEE Annual Conference & Exposition, Portland, Oregon, USA, June 23-26, 2024.
- C.7[†] **Moster, M.**, Kokinda, E., Boyer, D. M., Rodeghero, P. “Experiences with Summer Camp Communication via Discord”, in Proc. of the 46th IEEE/ACM International Conference on Software Engineering - Software Engineering Education and Training Track ([ICSE SEET ‘24](#)), Lisbon, Portugal, April 14-20, 2024.
- 2023 C.6 Kokinda, E., **Moster, M.**, Dominic, J., Rodeghero, P. “Under the Bridge: Trolling and the Challenges of Recruiting Software Developers for Empirical Research Studies”, in Proc. of the 45th IEEE/ACM International Conference on Software Engineering - New Ideas and Emerging Results Track ([ICSE NIER ‘23](#)), Melbourne, Australia, May 17-19, 2023.
- 2022 C.5 **Moster, M.**, Chandra, A., Chu, C., Liu, W., Rodeghero, P. “In the Zone: An Analysis of the Music Practices of Remote Software Developers”, in Proc. of the 2022 ACM/IEEE International Symposium on Empirical Software Engineering and Measurement ([ESEM ‘22](#)), Helsinki, Finland, September 19-23, 2022.
- C.4[†] **Moster, M.**, Kokinda, E., Re, M., Dominic, J., Lehmann, J., Begel, A., Rodeghero, P. “‘Can You Help Me?’ An Experience Report of Teamwork in a Game Coding Camp for Autistic High School Students”, in Proc. of the 44th IEEE/ACM International Conference on Software Engineering - Software Engineering Education and Training Track ([ICSE SEET ‘22](#)), Pittsburgh, PA, USA, May 21-29, 2022.
- 2021 C.3[†] **Moster, M.**, Ford, D., Rodeghero, P. “‘Is My Mic On?’ Preparing SE Students for Collaborative Remote Work and Hybrid Team Communication”, in Proc. of the 43rd IEEE/ACM International Conference on Software Engineering - Joint Software Engineering and Education Track ([ICSE JSEET ‘21](#)), Madrid, Spain, May 23-29, 2021.
- C.2 Huff Jr, E. W., Boateng, K., **Moster, M.**, Rodeghero, P., Brinkley, J. “Exploring the Perspectives of Teachers of the Visually Impaired Regarding Accessible K12 Computing Education”, in Proc. of the 51st Technical Symposium on Computer Science Education ([SIGCSE ‘21](#)), Toronto, Canada, March 13-20, 2021.

2020	C.1 Huff Jr, E. W., Boateng, K., Moster, M. , Rodeghero, P., Brinkley, J. "Examining the Work Experience of Programmers with Visual Impairments", in Proc. of the 36th International Conference on Software Maintenance and Evolution - New Ideas and Emerging Results Track (ICSME NIER '20), Adelaide, Australia, Sept. 27-Oct. 3, 2020.
Symposia and Workshop Papers 2022	SW.2 [‡] Moster, M. "Investigating Communication Tools in SE Capstone Courses", in Proc. of the 2022 ACM Conference on International Computing Education Research V.2 (ICER '22), Lugano and Virtual Event, Switzerland, August 7–11, 2022.
SW.1	Moster, M. , Begel, A., Boyer, D. M., Rodeghero, P. "A Longitudinal Study Exploring Autistic High Schoolers' Interests in CS", 4th Annual Autism at Work Research Workshop (AAWRW '22), Virtual, May 16-18, 2022.
Dissertation 2025	D.1 Moster, M. "Learning Through Online Participation: From Breakout Rooms to Discord", (2025). All Dissertations. 3900. https://open.clemson.edu/all_dissertations/3900/
Teaching Experience	<p>Assistant Professor August 2025 – Present Department of Computer Science University of North Carolina Wilmington</p> <p>CIT 425: Human-Computer Interfaces 2025 – Present Fall 2025: 23 undergraduate students (1 section) Spring 2026: TBD undergraduate students (1 section)</p> <p>CIT 213: Introduction to Databases 2025 – Present Fall 2025: 9 undergraduate students (1 section) Spring 2026: TBD undergraduate students (1 section)</p> <p>Adjunct Faculty January 2025 – May 2025 Department of Computer Science University of North Carolina Wilmington</p> <p>CIT 425: Human-Computer Interfaces 2025 Spring 2025: 9 undergraduate students (1 section, online)</p> <p>Graduate Teaching Assistant August 2019 – May 2025 School of Computing Clemson University</p> <p>CPSC 8740: AI-Receptive Software Development 2024 – 2025 Spring 2024: Aided in online course development Fall 2024: 116 graduate students (3 sections + 1 Coursera section) Spring 2025: 46 graduate students (1 Coursera section)</p> <p>CPSC 9500: SoCGSA Graduate Seminar 2023</p>

	Spring 2023: 6 graduate students	
CPSC 4910/4911: Senior Computing Practicum		2021 – 2023
Spring 2021: 87 undergraduate students (4 sections)		
Fall 2021: 60 undergraduate students (3 sections)		
Spring 2022: 72 undergraduate students (3 sections)		
Fall 2022, <i>Lead GTA</i> : 77 undergraduate students (3 sections)		
Spring 2023, <i>Lead GTA</i> : 94 undergraduate students (6 sections)		
CPSC 1010/1011: Computer Science I		2019, 2020
Fall 2019: 65 undergraduate students (3 sections)		
Fall 2020: 55 undergraduate students (3 sections)		
Instructor, EdASE Coding Camp for Autism		2021 – 2024
Online Summer Camp		Clemson University
Developed course content surrounding 2D game design using Godot Engine (2021, 2022) and Scratch (2023, 2024).		
Summer 2021: 14 campers		
Summer 2022: 15 campers		
Summer 2023: 20 campers		
Summer 2024: 20 campers		
Instructor, Engineering Expectations		June 2018 – August 2019
Summer & Weekend Camps		University of North Carolina Wilmington
Honors and Awards		
Exceptionally Engaging Letters award (Letters for a Prescientist)		2021
Graduate Student Travel Grant (Clemson University GSG)		2020
Robert M. Geist III Fellowship in Computing (Clemson University)		2019
Dean's List (8 semesters, UNCW)		2015 – 2019
Professional Memberships		
ACM		2023 – Present
IEEE		2021 – Present
Upsilon Pi Epsilon		2018 – Present
Professional Development		
CareerVolt Workshop Attendee Developing a Fundable Research Portfolio		
University of North Carolina Wilmington		Nov. 2025, Dec. 2025 & Jan. 2026
Book Circle: The Caring University		Center for Teaching Excellence
University of North Carolina Wilmington		October & November 2025
Book Circle: The Present Professor		Center for Teaching Excellence
University of North Carolina Wilmington		September & October 2025
Attendee College of Science & Engineering Grant Administrator Overview		
University of North Carolina Wilmington		October 2025

Service

University Service	Search Committee Member University of North Carolina Wilmington	Department of Computer Science 2025 – 2026
	Volunteer Technology & Analytics Career Day Student Preparation Event University of North Carolina Wilmington	2025
	Observing Member Information Technology Advisory Committee University of North Carolina Wilmington	2025 – 2026
Before UNCW	Invited Panelist An Inside Look at Clemson's MSCS Enrollment & Courses Clemson University	September & October 2024
	President School of Computing Graduate Student Association Clemson University	August 2022 – May 2024
	SoCGSA is a student organization that represents and holds events for Clemson's School of Computing graduate students in Computer Science, Human-Centered Computing, Digital Production Arts, and Biomedical Data Science & Informatics graduate programs.	
	Conducted administrative duties, organization of events, and task delegation.	
	Invited Panelist New Graduate Student & Postdoc Teaching Conference Clemson University	August 2022
Professional Service	Reviewer , ACM SIGCSE 2026	2025
	Reviewer , ASEE Annual Conference & Exposition 2026	2025
	Reviewer , ACM SIGCITE 2025	2025
	Reviewer , ASEE Annual Conference & Exposition 2025	2024
	Session Moderator ASEE Annual Conference & Exposition 2024 Portland, Oregon	June 2024
	Reviewer , ASEE Annual Conference & Exposition 2024	2024
	Student Volunteer Carolinas Women In Computing Conference 2022 University of North Carolina Wilmington	April 2022
	Student Volunteer FormaliSE at ICSE 2021 Madrid, Spain (Virtual)	May 2021

Reviewer, SEmotion

2021

Program Committee Member & Website Chair

SEmotion 2021

Madrid, Spain (Virtual)

May 2021

Sub-Reviewer, ESEC/FSE

2021

Community Service

Judge

Clemson Tigertown Throwdown Robotics Competition

Clemson University

February 4, 2023

Pen Pal, Letters to a Prescientist Program

August 2020 – May 2023

Corresponded through letters with an elementary school student each school year who is interested in learning more about STEM careers.

Received an **award for Exceptionally Engaging Letters** for the 2020-2021 school year.