

Makayla Moster

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✉ mmoster@clemson.edu

in [mmoster](#)

🔗 [makayla-moster](#)

ID [Makayla Moster](#)

💻 makayla-moster.github.io

G [Makayla Moster](#)

Research Interests

Computer Science Education, Software Engineering Education,
Remote/Hybrid Learning, Remote/Hybrid Work, HCI

Education

Clemson University

Clemson, SC

Ph.D. Candidate in Computer Science

August 2019 – Present

Advisor: [Dr. Paige Rodeghero](#)

Clemson University

Clemson, SC

Graduate Certificate, Engineering and Science Education

December 2022

Clemson University

Clemson, SC

M.S. in Computer Science

May 2021

University of North Carolina Wilmington

Wilmington, NC

B.S. Honors in Computer Science, concentration in Digital Arts

May 2019

Magna Cum Laude

GPA: 3.886

Thesis: “Conforming Realistic, Procedural Tree Models to User-Drawn Shapes”

Advisor: [Dr. Brittany Morago](#) Committee: Drs. Toni Pence & Russell Herman

Research Experience

Research Assistant, HFSE Lab

May 2020 – Present

Advisor: [Dr. Paige Rodeghero](#)

Clemson University

Studying how communication tools prepare collegiate software engineering students for roles in industry.

Researcher, EdASE Coding Camp for Autism

Jan. 2021 – Present

EdASE Directors: Drs. [Paige Rodeghero](#) & [Andrew Begel](#) codeatclemson.com

Examining how computer coding camps for autism impact students’ self-efficacy and communication skills.

Research Assistant, Visual Computing Lab

Jan. 2020 – May 2020

Advisor: [Dr. Daljit Singh Dhillon](#)

Clemson University

Developed code to model reaction-diffusion systems over arbitrary meshes.

Teaching Experience

Graduate Teaching Assistant

Fall 2019, Fall 2020 – Present

School of Computing

Clemson University

CPSC 4910/4911: Seminar in Professional Issues II

S21, F21, S22, F22

Conducted lab lectures, provided aid, and was scrum master for 3 sections of student SE teams. (approx. 60 - 80 undergraduate students)

CPSC 1010/1011: Computer Science I

F19, F20

Conducted lab lectures, provided aid and office hours, and graded weekly introductory programming assignments for 3 sections of students. (60 undergraduate students)

Instructor, EdASE Coding Camp for Autism

2021, 2022

EdASE Directors: Drs. [Paige Rodeghero](#) & [Andrew Begel](#) codeatclmson.com

Developed 2D game development course content and activities involving pixel art and videogame narratives.

Helped lead camp instruction and developed content for multiple days of camp.

Liaison between parents and instructors for the 2022 camp.

Instructor, Engineering Expectations

June 2018 – Aug. 2019

Summer & Weekend Camps

University of North Carolina Wilmington

Taught children how to code in HTML/CSS, Python, Java, and Scratch in several week-long and weekend computer science camps. (20 students/camp)

Publications

Peer-Reviewed

Conference Papers

- | | | |
|------|-----|---|
| 2022 | C.6 | 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.
Professional Memberships		
		Member, IEEE 2021 – Present
		Member, Upsilon Pi Epsilon 2018 – Present
		Inducted into the UNCW chapter of Upsilon Pi Epsilon in April 2018, the international honors society for the Computing and Information disciplines.
Honors and Awards		
		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
Service and Outreach		
	President	School of Computing Graduate Student Association Clemson University Aug. 2022 – Present
		SoCGSA is a student organization that represents and holds events for computing graduate students in CS, HCC, DPA, and BDSI.
		Conducted administrative duties, organization of events, and task delegation.
	Invited Panelist	New Graduate Student & Postdoc Teaching Conference Clemson University Aug. 2022
	Student Volunteer	Carolinas Women In Computing Conference 2022 University of North Carolina Wilmington April 2022
	Hackathon Participant	CUhackit 2022

Clemson University

January 29-30, 2022

Student Volunteer

[FormaliSE at ICSE 2021](#)

Madrid, Spain (Virtual)

May 2021

Program Committee Member & Website Chair

[SEmotion 2021](#)

Madrid, Spain (Virtual)

May 2021

Deployed, edited, and kept website up-to-date before and during conference period.

Pen Pal, [Letters to a Prescientist Program](#)

Aug. 2020 – Present

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.

President, Upsilon Pi Epsilon

University of North Carolina Wilmington

Aug. 2018 – May 2019

[Skills](#)

Research Methods

Survey, Survey Design, Interview, Interview Design, Qualitative Analysis, Quantitative Analysis, Grounded Theory

Programming Languages

Python, Java, C++, C, \LaTeX , HTML/CSS

Tools

OpenGL, Maya, Git, GitHub, Adobe Photoshop, Adobe Illustrator, Adobe XD, MAXQDA, Azure DevOps, Qualtrics, Taguette

Languages

English (fluent), Spanish (limited conversant)