Makayla Moster

➤ mmoster@clemson.edu♠ makayla-moster♠ makayla-moster.github.io♠ Makayla Moster♠ 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 Landa

CRA 2886

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 codeatclemson.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

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, LTEX, HTML/CSS

Tools

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

Languages

English (fluent), Spanish (limited conversant)