MAKAYLA MOSTER

mmoster@clemson.edu | mmoster | makayla-moster | makayla-moster.github.io

Education

Clemson University — Clemson, SC
Ph.D. Student — *Aug. 2019 – Present*
- Robert M. Geist Fellowship — 2019-2020

University of North Carolina Wilmington — Wilmington, NC
B.S. Honors in Computer Science — *Aug. 2015 - May 2019*
- Concentration in Digital Arts
- Magna Cum Laude — 3.886 / 4.0
- Thesis title: "Conforming Realistic, Procedural Tree Models to User-Drawn Shapes"

Experience

Graduate Teaching Assistant — Aug. 2019 – Dec. 2019, Aug. 2020 - Present
School of Computing — *Clemson University*
- **CPSC 1011** — **Fall 2019, Fall 2020**
  - Instructed 3 introductory computer science lab sessions, held weekly office hours, and graded lab assignments each semester.

Graduate Research Assistant — Jan. 2020 – May 2020
School of Computing — *Clemson University*
- Developed code to model reaction-diffusion systems over arbitrary meshes under the guidance of Dr. Daljit Singh Dhillon.

Computer Science Tutor — Sept. 2018 – Dec. 2018
Department of Computer Science — *University of North Carolina Wilmington*
- Tutored students in multiple computer science courses including Introduction to Programming, Discrete Mathematics, Data Structures, and Object-Oriented Programming.

Instructor — June 2018 – Aug. 2019
Engineering Expectations 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.

Publications

2021

- **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 (ICSE JSEET '21), Madrid, Spain, May 23-29, 2021.
- 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

- 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 (ICSME NIER '20), Adelaide, Australia, Sept. 27-Oct. 3, 2020.

Posters & Presentations

Visual Computing Seminar Fall 2019
Clemson University *Clemson, SC*

- Presentation Title: "Conforming Realistic, Procedural Tree Models to User-Drawn Shapes"

UNCW Spring Undergraduate Research Showcase Spring 2019
University of North Carolina Wilmington *Wilmington, NC*

- Poster Title: "Conforming Realistic, Procedural Tree Models to User-Drawn Shapes"

Awards, Fellowships, & Honors

Robert M. Geist III Fellowship in Computing Aug. 2019 – May 2020
Recipient *Clemson University*

Upsilon Pi Epsilon Apr. 2018
UNCW Chapter President *2018 - 2019*

- Inducted into the UNCW chapter of Upsilon Pi Epsilon, the international honors society for the Computing and Information disciplines.

Dean's List Aug. 2015 – May 2019
8 semesters *University of North Carolina Wilmington*

Research Projects

Undergraduate Thesis Aug. 2018 – May 2019
Conforming Realistic, Procedural Tree Models to User-Drawn Shapes *C++, OpenGL*

- *Committee:* Dr. Brittany Morago (Advisor), Dr. Toni Pence, and Dr. Herman Russell
- For departmental honors in Computer Science.
- This project included building upon a previous project to generate an evolving, realistic, three-dimensional plant model with leaf venation and real-time lighting using fractals. The main focus was to generate a plant model within a user-defined shape.

Undergraduate Directed Independent Study Jan. 2018 – May 2018
Generating Plant Models using Fractals *C++, OpenGL*

- *Advisor:* Dr. Brittany Morago
- This directed independent study produced an evolving plant model with basic leaf venation and basic real-time lighting using fractals.

Extracurriculars

SEMotion 2021 Program Committee Dec. 2020 – Present
Invited *ICSE 2021 Workshop*

SEMotion 2021 Website Chair Dec. 2020 – Present
ICSE 2021 Workshop

- Edited and updated website.

Letters to a Pre-Scientist Program Aug. 2020 – May 2021
Pen Pal *www.prescientist.org*

- Corresponded through letters with an elementary school student aspiring for a job in STEM.

Science Olympiad Volunteer 2018, 2019
Experiment and Test Administrator Assistant *University of North Carolina Wilmington*

S.T.E.A.M. Celebration Volunteer Sept. 2017
Mathematics and Statistics Club *University of North Carolina Wilmington*

Mathematics and Statistics Club Aug. 2017 – May 2019
Member *University of North Carolina Wilmington*

SIGGRAPH Club Aug. 2016 – May 2019
Member *University of North Carolina Wilmington*