

MAKAYLA MOSTER

✉ mmoster@clemson.edu | [in mmoster](https://www.linkedin.com/in/mmoster) | [makayla-moster](https://github.com/makayla-moster) | makayla-moster.github.io

Education

Clemson University

Ph.D. Student

- Robert M. Geist Fellowship

Clemson, SC

Aug. 2019 – Present

2019-2020

University of North Carolina Wilmington

B.S. Honors in Computer Science

- Concentration in Digital Arts
- Magna Cum Laude
- Thesis title: “Conforming Realistic, Procedural Tree Models to User-Drawn Shapes”

Wilmington, NC

Aug. 2015 - May 2019

3.886 / 4.0

Experience

Graduate Teaching Assistant

School of Computing

- CPSC 1011

* Instructed 3 introductory computer science lab sessions, held weekly office hours, and graded lab assignments each semester.

Aug. 2019 – Dec. 2019, Aug. 2020 - Present

Clemson University

Fall 2019, Fall 2020

Graduate Research Assistant

School of Computing

- Developed code to model reaction-diffusion systems over arbitrary meshes under the guidance of Dr. Daljit Singh Dhillon.

Jan. 2020 – May 2020

Clemson University

Computer Science Tutor

Department of Computer Science

- Tutored students in multiple computer science courses including Introduction to Programming, Discrete Mathematics, Data Structures, and Object-Oriented Programming.

Sept. 2018 – Dec. 2018

University of North Carolina Wilmington

Instructor

Engineering Expectations Summer & Weekend Camps

- Taught children how to code in HTML, CSS, Python, Java and Scratch in several week-long and weekend computer science camps.

June 2018 – Aug. 2019

University of North Carolina Wilmington

Publications

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

Clemson University

Fall 2019

Clemson, SC

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

UNCW Spring Undergraduate Research Showcase

University of North Carolina Wilmington

Spring 2019

Wilmington, NC

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

Awards, Fellowships, & Honors

Robert M. Geist III Fellowship in Computing

Recipient

Aug. 2019 – May 2020

Clemson University

Upsilon Pi Epsilon

UNCW Chapter President

Apr. 2018

2018 - 2019

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

Dean’s List

8 semesters

Aug. 2015 – May 2019

University of North Carolina Wilmington

Research Projects

Undergraduate Thesis

Conforming Realistic, Procedural Tree Models to User-Drawn Shapes

Aug. 2018 – May 2019

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

Generating Plant Models using Fractals

Jan. 2018 – May 2018

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

Invited

Dec. 2020 – Present

ICSE 2021 Workshop

SEMotion 2021 Website Chair

ICSE 2021 Workshop

Dec. 2020 – Present

- Edited and updated website.

Letters to a Pre-Scientist Program

Pen Pal

Aug. 2020 – May 2021

www.prescientist.org

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

Science Olympiad Volunteer

Experiment and Test Administrator Assistant

2018, 2019

University of North Carolina Wilmington

S.T.E.A.M. Celebration Volunteer
Mathematics and Statistics Club

Sept. 2017
University of North Carolina Wilmington

Mathematics and Statistics Club
Member

Aug. 2017 – May 2019
University of North Carolina Wilmington

SIGGRAPH Club
Member

Aug. 2016 – May 2019
University of North Carolina Wilmington