MAKAYLA MOSTER

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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 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 Website Chair Dec. 2020 – Present
ICSE 2021 Workshop
- Edited and updated website.

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*