MAKAYLA MOSTER

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Education

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

University of North Carolina Wilmington
B.S. Honors in Computer Science
Wilmington, NC
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 4910/4911 — Spring 2021
- CPSC 1011 — Fall 2019, Fall 2020

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 - Joint Software Engineering and Education Track (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 - New Ideas and Emerging Results Track (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. Russell Herman
- 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 & Service

SEMotion 2021 Program Committee
Invited

Dec. 2020 – Present
ICSE 2021 Workshop

SEMotion 2021 Website Chair

Dec. 2020 – Present
ICSE 2021 Workshop

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

Letters to a Pre-Scientist Program
Pen Pal

Aug. 2020 – Present
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 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*