# MAKAYLA MOSTER

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## 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"

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## 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.

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## 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

### 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*