

Elizabeth Matthews | CV

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🌐 <https://cise.ufl.edu/~matthews/>

Interests

Teaching:

Software engineering and development using video game construction as motivation.
Teaching logical thinking to promote interest in mathematics and computer science.
Encouraging minorities in STEM-based education and classes.

Research:

Procedural generation in graphic arts production with special emphasis on video game media.
The effect of procedural generation on enjoyment and replay value in video game media.
Inter-disciplinary research topics to broaden the impact of traditional computer science ideas.

Education

University of Florida **Gainesville, FL**
PhD. in Human Centered Computing, 4.0 GPA *August 2014–present*

Clemson University **Clemson, SC**
MS. in Computer Science, 4.0 GPA *August 2009–May 2014*

Western Washington University **Bellingham, WA**
B.S. in Computer Science, Minor in Mathematics, 3.45 GPA *August 2004–June 2009*

Teaching Experience

Lecturing Position **Graduate Teaching Assistant**
University of Florida, "Computer Programming using Java" *Fall 2017*
Responsibilities: On Campus Lectures, Course Material Design, Holding Office Hours

Lecturing Position **Graduate Teaching Assistant**
UFOonline, "Programming Fundamentals I" *Fall 2015 – Summer 2017*
Responsibilities: Web-Based Lecture Creation, Course Material Design, Grading Homework, Online Office Hours

Lecturing Position **Graduate Teaching Assistant**
Clemson University, "Introduction to Programming in C" *Spring 2013*
Responsibilities: On Campus Lectures, Course Lecture Design, Holding Office Hours, Grading Homework

Lab TA **Graduate Teaching Assistant**
Clemson University, Multiple Classes in CS *Fall 2009 – Spring 2013*
Responsibilities: Grading Homework, Supervise and assist in programming labs about Algorithms and Data Structures, Introduction to Information Technology, Software Development Foundations

Lab TA **Undergraduate Teaching Assistant**
Western Washington University, Multiple Classes in CS *Fall 2004 – Spring 2009*
Responsibilities: Grading Homework, Supervise and assist in programming labs

Research Experience

Research Projects

- CyanoHABIT** **University of Florida**
Graduate Researcher *Summer 2017*
Development and testing of an informational technology on CyanoBacterial Harmful Algal Blooms.
- Prime III** **University of Florida**
Graduate Researcher *Fall 2014 – Spring 2015*
Development and testing of the Accessible Voting System, Prime III.
- The Institute for Watershed Studies Website** **Western Washington University**
Undergraduate Researcher, <http://www.wvu.edu/iws/> *Summer 2007 and Summer 2008*
Web development for the IWS interactive webpages and Small Lakes Project.

Papers

- Elizabeth A. Matthews, Geoffrey B. Matthews, and Juan E. Gilbert. **A Framework for the Assessment of Enjoyment in Video Games.** *Under Review for HCII 2018*, 2018.
- Elizabeth A. Matthews and Brian A. Malloy. **Incorporating Coherent Terrain Types into Story-Driven Procedural Maps.** *Meaningful Play 2012: Designing and Studying Games that Matter*, 2012, 2012.
- Elizabeth A. Matthews and Geoffrey B. Matthews. **Procedural generation of Cuban dance motion.** *Computer Games (CGAMES), 2011 16th International Conference on*, pages 293–297. IEEE, 2011.
- Elizabeth A. Matthews and Brian A. Malloy. **Procedural generation of story-driven maps.** *Computer Games (CGAMES), 2011 16th International Conference on*, pages 107–112. IEEE, 2011.

Posters

- Elizabeth A. Matthews, Robin A. Matthews, and Juan E. Gilbert. **CyanoHABIT: A Novel Game to Identify Harmful Freshwater Algae.** *Under Review for HCII 2018*, 2018.

Outreach Experience

- Codelt Day** **University of Florida**
Teacher and Helper *Summer 2015 and Fall 2015*
Assistance in running and teaching middle school to high school ranged children with lego robots and coding.

Honors and Awards

- Member of the Eta Kappa Nu Epsilon Sigma Chapter** **EKN**
For outstanding achievement in the sciences at University of Florida *April, 2015*
- Best Student Paper Award** **CGAMES, USA**
Procedural Generation of Story-Driven Maps, Third Place *July, 2011*
- The National Society of Collegiate Scholars** **WWU**
Scholarship, Leadership and Service at Western Washington University *April, 2005*
- Computer Science Merit Scholar** **WWU**
Merit Scholar in Computer Science at Western Washington University *May, 2004*