

Keith McNamara, Jr.

Ph.D. student in Human Centered Computing  
University of Florida

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## Education

- Ph.D. student in Human Centered Computing  
Graduate Research Assistant, under Dr. Juan Gilbert  
**University of Florida** Sept 2018 – Present
- Bachelor of Science in Computer Science,  
**University of Maryland, Baltimore County** Sept 2014 – May 2018

## Research Experience

### Graduate Researcher

*University of Florida – Computer and Information Science and Engineering Department*

- The Effects of Distraction on Information Retention in Augmented Reality Education
  - Conducted a study of distractions on information retention in education through an augmented reality platform
- The Effects of Native Language Consistency on Learners' Introduction to Block-Based Instructional Technologies
  - Conducted a study native language impacts on introductory performance to programming
- Should I Answer? Measuring User Responses to Anti-Robocall Indicators
  - Conducted user studies to evaluate user experience with spam calls
  - Tested a prototype application to gauge various experiences with different app designs
  - Performed statistical analysis on data collected to discuss results and visualize information

### Undergraduate researcher, under Dr. Marie desJardins

Dec 2016 – May 2018

*University of Maryland, Baltimore County (UMBC) – Computer Science and Electrical Engineering Department- Maple Lab*

- Conducted independent research comparing results of MAXQ and RAMDP learning models for runtime, learning rates, and task completions Dec 2016 – May 2018
- Cooperatively facilitated a team to work on theoretical applications for AMDPs and POMDPs
- Led a project for development of a partially observable MDP (POMDP) learning domain called Rock Sample
  - Information hidden from the learning agent until interaction with parts of the domain
  - Project to be used to test with AMDP research

- Worked on creation of learning agent domains for Markov Decision Process (MDP) and Abstract MDP (AMDP)
- Participated in a team dedicated to furthering graduate work on concept formation

**Research assistant, group of Dr. Ivan Erill**

2013-2014

*UMBC – Department of Biological Sciences – Bioinformatics – Erill Lab*

- Conducted research utilizing algorithms to find transcription factor binding motifs
- Compared transcription factors in multiple organisms to find the binding

**Technical Experience/Additional Projects**

**Graduate Student**

September 2018 – December 2018

*University of Florida – Computer and Information Science and Engineering Department*

- Designed a virtual reality experience for museum attendees to learn about sea level rise in an exhibit for the University of Florida Museum of Natural History
  - Utilized the Unity Game Engine to design a virtual environment
  - Programmed scripts in C# and added natural effects and user interaction

**Courses Taken**

- VR for the Social Good – Fall 2018
- User Experience Design – Fall 2018
- Human-Computer Interaction – Spring 2019
- Research Methods for Human Centered Computing – Spring 2019
- Spoken Dialog Systems – Fall 2019
- Information Visualization – Fall 2019
- Computer Networks – Spring 2020
- Analysis of Algorithms – Spring 2020

**Publications**

- Sherman, I., Bowers, J., McNamara, K., Gilbert, J.E., Ruiz, J., & Traynor, P., (2020) Are You Going to Answer That? Measuring User Responses to Anti-Robocall Application Indicators, In Proceedings of the ISOC Network & Distributed Systems Security Symposium (NDSS).
- Pedro G. Feijoo-Garcia, Keith McNamara, Jr., and Jacob Stuart. 2019. Work in Progress: Native Language Consistency Effect on Learners' Introduction to Block-Based Instructional Technologies. In Proceedings of the 20<sup>th</sup> Annual SIG Conference on Information Technology Education (SIGITE '19). Association for

Computing Machinery, New York, NY, USA, 147. DOI:  
<https://doi.org/10.1145/3349266.3351368>

## Teaching Experience

- **Undergraduate Teaching Assistant** Sept 2017 – May 2018  
Served as a teaching assistant for Ethical Issues in Information Technology  
Graded papers and evaluated student assignments related to topics being discussed  
in the class

## Awards/Recognitions

- University of Florida Generation NEXT Scholarship 2019
- McKnight Doctoral Fellowship 2018
- Graduate Student Preeminence Award 2018
- UMBC Meyerhoff Scholars Program 2014
- Wyatt-Martin & Associates Scholarship 2014
- Mark Thomas Hopkins Memorial Scholarship 2014

## Interests

- **Misinformation/Disinformation.** My research goals lie in the realm of combatting the spread of false or harmful information, especially to minority and vulnerable communities. With the increasing scale and reach of social media and messaging services, the ease at which information can be shared is always improving. Thus, the spread of false or misrepresented information, intentional or not, is also a concern. I desire to establish frameworks for evaluating existing information sharing and verification tools, enhance these systems' design to meet specific population needs, develop systems that provide transparency and traceability of information, and allow easier verification capabilities for various at-risk communities.
- **Human Computer Interaction.** I am interested user interaction with software systems and applications. I want to improve the overall effectiveness and efficiency of these systems by designing the applications to work well with various user groups. For example, if an interface is developed for an application, it can be adjusted to work with different user groups with relative ease.
- **Artificial Intelligence.**
- **Adaptive Interfaces.**

## Conferences

- Richard Tapia Diversity in Computing Conference September 2019
- Richard Tapia Diversity in Computing Conference September 2018
- 44<sup>th</sup> National Society of Black Engineers March 2018
- ITSMF Conference June 2015

## References

Dr. Juan Gilbert  
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