Abstract:
Effective teams are an essential component of modern healthcare and business. While team training can lead to significant improvements in job performance and communication, logistical difficulties often make it difficult to implement team training programs in the real world. Virtual humans can help overcome these difficulties by filling in for missing teammates during training sessions. In this talk, I discuss how to create virtual humans that can fill in for missing humans, and consider the behavioral implications of using virtual humans for team training. Specifically, I discuss how virtual teammates can create challenging training opportunities comparable to training with real humans, and how virtual teammates can be leveraged to create new training opportunities that are difficult to implement when working with teams composed entirely of humans.

Bio:
Andrew Robb is a postdoctoral fellow at the School of Computing at Clemson University. He received his Ph.D in Computer Engineering at the University of Florida in 2015. His research interests are human factors in virtual reality, specifically social interactions with virtual humans, the experience of spatial and social presence, and virtual reality training. He has development of a range of different virtual reality training simulations, including closed loop communication training, medical interviewing, physical exam simulators, and team training programs. His dissertation research explored how to create virtual teammates that can dynamically replace missing teammates during training sessions and what effect this replacement had on behavior of human trainees and on training outcomes.