Virtual worlds and massively-multiplayer online games are rich sources of information about large-scale teams and groups, offering the tantalizing possibility of harvesting data about group formation, social networks, and network evolution. They provide new outlets for human social interaction that differ from both face-to-face interactions and non-physically-embodied social networking tools such as Facebook and Twitter. We aim to study group dynamics in these virtual worlds by collecting and analyzing public conversational patterns of users grouped in close physical proximity. To do this, we created a set of tools for monitoring, partitioning, and analyzing unstructured conversations between changing groups of participants in Second Life, a massively multi-player online user-constructed environment that allows users to construct and inhabit their own 3D world. Although there are some cues in the dialog, determining social interactions from unstructured chat data alone is a difficult problem. However these environments lack many of the cues that facilitate natural language processing in other conversational settings and different types of social media. Public chat data often features players who speak simultaneously, use jargon and emoticons, and only erratically adhere to conversational norms.

Major: Computer Science

Educational Career:
Bachelor's of Computer and Information Systems Engineering, BS, 2004, NED University of Engineering and Technology
Master's of Computer Science, MS, 2011, University of Central Florida

Committee in Charge:
Gita Sukthankar, Chair, EECS
Hassan Foroosh, UCF/EECS
Michael Georgiopoulos, UCF/EECS
Georgios Anagnostopoulos, FIT/College of Engineering

Approved for distribution by Gita Sukthankar, Committee Chair, on September 22, 2011.

The public is welcome to attend.