



## DISSERTATION DEFENSE



### Jordan Huffaker

Social Reference Processing  
with Collaborative Human-  
AI Systems

Tuesday, July 18, 2023

4:00pm – 6:00pm

3941 Beyster

Hybrid – [Zoom](#) Passcode:80364

**ABSTRACT:** I introduce several human-AI systems that can understand and process *social references* — language that invokes connotations by overlaying parts of social and cultural contexts. I argue that developing a rich understanding of social references is a key challenge that must be overcome in order to accomplish numerous communication tasks, especially in online environments where language rapidly develops. In particular, I demonstrate the importance of understanding social references in order to distinguish emotionally manipulative language from content, to identify rhetoric that others marginalized people groups, and to ensure high-quality language translations for complex terms. In each of these problem domains, I examine the challenges that limit existing systems, including systems that rely on the capabilities of crowds and machines on their own. Instead, I propose a series of human-AI approaches that make it possible to coordinate groups of people and machines to accomplish each of these tasks more effectively.

**CHAIR:** Prof. Mark Ackerman