

Institute for Mind and Brain Colloquium Series Invited Speaker



Dr. Valerie Shalin Professor, Department of Psychology Wright State University

"Automating the Interpretation of Behavioral Measures in Open Task Environments"

Abstract: Many disciplines in psychology benefit from observations of interactive behavior in rich environments with objects and other agents. Proponents of observational methods identify limitations in both the tasks and measurement methods characteristic of the controlled laboratory experiment, resulting in narrow theories that may not generalize well to real-world performance in learning, decision making, and perception among other disciplines in psychology.

Nevertheless, observing, recording, representing and analyzing behavior in open task environments is labor intensive, limiting the amount of useable data and hence the number of predictors that can be studied, and typically imposing a burden of inter-rater reliability. An equally vexing challenge is characterizing the context in which the behavior occurs. Redirected gaze, for example, is meaningful because it occurs in response to people or objects in the environment.

Computer science provides methods for the collection and interpretation of massive amounts of behavioral data, supporting pattern detection and classification that is synchronized with the environment. This talk uses examples from the speaker's and the new U of SC Artificial Intelligence Institute Director's (Sheth) labs to illustrate the promise of these methods in open task environments (including support for intervention) and to identify some of the remaining psychometric issues.

October 6, 2020@ 3:30pm – 4:45pm Institute for Mind and Brain Sponsored Zoom Meeting:

https://us02web.zoom.us/j/88044128414?pwd=QIFyN1lqbWNibXBRNEVSeVREZE5UZz09

Meeting ID: 880 4412 8414 Passcode: 262168 One tap mobile +13126266799