UNIVERSITY OF SOUTH FLORIDA

Defense of a Master's Thesis

Towards More Task-Generalized and Explainable AI Through Psychometrics

by

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For the MSCP degree in Computer Engineering

In this work, I propose that adopting the methods, principles, and guidelines of the field of psychometrics, can help the AI community to build more task-generalizable and explainable AI. Three arguments are presented and explored. These arguments are that psychometrics can help by providing 1) a framework for formulating better datasets, 2) psychometric AI data that can lead to models of generalization in AI, and 3) explainable AI through more informative evaluations. Additionally, I perform a literature review of the relevant concepts and discuss existing work that 1) utilizes psychometrics for AI evaluations and 2) utilizes psychometric tests to create psychometric data of AI performance

Monday, October 31st, 2022
9:00 AM
ENB 313

THE PUBLIC IS INVITED

Examining Committee
John Licato, Ph.D., Major Professor
Lawrence Hall, Ph.D.
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Robert Bishop, Ph.D.
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