Thursday, October 12, 2023
4:00 PM, Room 204, Caldwell Building

Dr. Yishi Wang

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Detecting True Lies, a Bayesian Approach for Modeling Veterans' Credibility using TOMM

The goal of this research is to evaluate the likelihood of credible responses from examinees, based on Performance validity tests (PVTs) scores from TOMM, the Test of Memory Malingering. Traditional research with TOMM adopts a single cutoff score. Recent studies suggest that different cutoff scores might be a better option, given various preexisting conditions of participants. The present study proposes a Bayesian approach in evaluating the likelihood of creditable efforts, instead of using the traditional cutoff score approach, since it is challenging to distinguish participants' efforts as creditable versus non-creditable with only one point of difference. Our experiment results utilize datasets of known groups from previous literature, and the resulting likelihood is much more easily interpreted than using the traditional approach. Simulation results suggest that the proposed approach is promising.

About the Speaker

Yishi Wang is a statistics professor in the Department of Mathematics and Statistics at the University of North Carolina Wilmington. His areas of research interest include: Statistical machine learning and data mining, semi-parametric models, survival analysis, and statistical consulting. He is the actuarial science certificate coordinator at UNCW.