THE UNIVERSITY OF GEORGIA DEPARTMENT OF STATISTICS Colloquium Series

Thursday, April 6th, 2023 4:00 PM, Room 204, Caldwell Building

Dr. Robert Mee

Professor of Business Analytics in the Haslam College of Business, University of Tennessee

A Synthesis for Order-of-Addition Models

A wide variety of models have been proposed recently for experiments that vary the order in which components are added, or steps are performed. There are models with a linear effect of each component's position in the sequence, and models with added quadratic effects and product terms. Kriging models based on a component's position have also been proposed. Before models based on each component's position were introduced, models based on the relative position of each pair of components became popular. This talk connects these models and provides lack-of-fit tests in order to assist with model selection and interpretability of parameters. Examples from the literature illustrate the need for these varied models.

About the Speaker

Robert Mee is the William and Sara Clark Professor of Business Analytics in the Haslam College of Business at the University of Tennessee. He teaches statistics classes for undergraduates in the Global Leadership Scholars (GLS) program, for the MSBA program and for the PhD in analytics. He has taught a popular FYS 129 course titled "The Question of God" for 16 years.

Mee received his bachelor's in management science from Georgia Institute of Technology and his master's and doctorate in statistics from



Iowa State University. He is an elected fellow of the American Statistical Association and has authored more than 60 refereed journal articles He served on Technometrics' management committee for 12 years and as an associate editor for seven years. Currently he serves on the Journal of Quality Technology's editorial board.

Mee's research interests include design and analysis of experiments, conjoint analysis, and customer analytics. He is the author of *A Comprehensive Guide to Factorial Two-Level Experimentation*.

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