



THE UNIVERSITY OF GEORGIA
DEPARTMENT OF STATISTICS

Colloquium Series

Xiaoming Zhai

1/18/2024

4:00 PM, Room 204, Caldwell Building

Associate Professor

Department of Mathematics, Science, and Social
Studies Education



AI and Formative Assessment: The Train Has Left the Station

Researchers have been questioning AI --whether we can and should use AI for formative assessment. AI is already being employed, for better or worse, to facilitate formative assessment in various educational contexts. In this talk, Dr. Zhai will demonstrate research on AI-based assessment in science education. He will respond to the many concerns raised in the field regarding AI being used for formative assessment practices. He argues that the focus of research should be on how we can help educators manage an AI revolution that has outpaced a research community caught unaware and recognize the remarkable progress that AI has contributed to formative assessment.

About the Speaker

Dr. Xiaoming Zhai is Associate Professor in Science Education and Artificial Intelligence, Director of the AI4STEM Education Center at the University of Georgia. He obtained a Ph.D. at Beijing Normal University and was a Postdoctoral Research Associate at Stanford University and Michigan State University. Dr. Zhai's research focuses on developing AI-based innovative assessments and supporting assessment practices in science. He is a Lead Principal Investigator (PI), PI, and Co-PI for several NSF, NIH, AERA, and NAEEd/Spencer projects, aiming to leverage cutting-edge technology, AI/machine learning, to facilitate high-quality assessment practices in science. His research was published in top-tier journals such as the Journal of Research in Science Teaching, International Journal of Science Education, and Computers & Education. He widely collaborated with researchers from the USA, Canada, Germany, Norway, China, India, etc., and serves as a global leader in his area of research. Dr. Zhai chaired the NSF-funded 2022 International Conference for AI-based Assessment in STEM and is serving as Founding Chair of the National Association of Research in Science Teaching (NARST)'s Research Interest Group RAISE (Research in AI-involved Science Education). As Guest Editor, he edited the special issue of the Journal of Science Education and Technology, titled Applying Machine Learning in Science Assessment, and two special topics in Frontiers in Education, AI in Tackling STEM Education Challenges and Machine Learning Applications in Educational Studies, and a special issue in International Journal of Science and Mathematics Education, titled Innovative Uses of Technologies for Online and Hybrid Learning in Science, Mathematics and STEM Education in K-12 Contexts Focus and Scope. He serves as editor for the Oxford University Press contracted book, Uses of AI in STEM Education. He sits on the Editorial Board of Journal of Research in Science Teaching, the Journal of Science Education and Technology, and Disciplinary and Interdisciplinary Science Education Research. He is a consultant for several federal grants. Dr. Zhai's research has been recognized by receiving the American Educational Research Association's TACTL Early Career Researcher Award, NAEEd/Spencer Research Development Award, Alexander von Humboldt Fellowship, Jhumki Basu Scholar Award, Sarah Moss Fellowship, and three UGA Provost's awards

For more information, please contact us at:

Phone: 706.542.5680 E-Mail: stat@uga.edu

Parking is available in the North Campus Parking Deck.

For a UGA Campus map, please see: <http://aviary.camplan.uga.edu/CampusMap/Default.aspx>