

## **Research Methodologies Applied in AI & Algorithmic Platform Scholarship**

1) Presentation 1: Digital Ethnography and Algorithmic Platform Methodologies to Study the #ScienceofReading in TikTok

Panelists:

- C.C. Bates, Professor, Dean-College of Education
- Heather Dunham, Assistant Professor, Education & Human Development
- Sarah Jerasa, Assistant Professor, Education & Human Development
- Lindsey Rowe, Assistant Professor, Education & Human Development

2) Presentation 2: Exploring Public Perception of AI Through Social Listening

Panelists:

- Brandon Boatwright, Assistant Professor, Department of Communication
- Enamel Kabir, Research Associate, Department of Communication

3) Presentation 3: Quantitative Ethnography: Analyzing large datasets from digital spaces in meaningful and actionable ways

Panelist: Golnaz Arastoopour Irgens, Assistant Professor, Education & Human Development

4) Presentation 4: Exploring social media as informal teacher professional development

Panelist: Cynthia Deaton, Associate Professor, Teaching & Learning

As we engage in research exploring digital technologies using artificial intelligence (AI) or AI-interfaced algorithms, it is essential to consider impact, implications, and outcomes while also recognizing the emerging methodologies being used to explore these phenomena. Previous methods or protocols used to analyze digital spaces have often overlooked human-machine interconnections. More nuanced methods reflective of the AI tools and AI-interfaced coding need to be applied to account for the complex affordances and capabilities of these spaces.

# RESEARCH SYMPOSIUM

This symposium panel will include four interdisciplinary AI-related research studies highlighting how methodologies for sampling, data collection, and data analysis can allow scholars to explore AI-technologies in their fields. Presentation 1 includes methodologies for navigating TikTok and its sensitive algorithm to collect and analyze data using digital ethnographic approaches, walkthrough methodology (Light et al., 2018) and constructs that determine virality (Bruni, Francalanci, Giacomazzi, 2012). Presentation 2 provides an examination of methods used to study online conversations around the new Sora text-to-video platform by OpenAI. This study's methods consider applications of text-to-video AI and the ethical implications for use. Presentation 3 will summarize a developing methodology, Quantitative Ethnography (QE), for analyzing large digital datasets that help researchers make sense of how people navigate AI-based applications. Presentation 4 presents their methodologies to explore subReddit as an opportunistic professional development space for science educators and the application of coding data curated through Sprinklr using Atlas.ti for inductive and a priori coding. Overall, this methodology panel will offer applications for interdisciplinary research using AI-integrated platforms.