Dr. Wei Peng

Professor, Michigan State University

Wei Peng (Ph.D. in Communication, University of Southern California, 2006) is a Professor in the Department of Media and Information, Michigan State University. Her recent projects focus on using conversational agents or chatbots, digital games, and mobile apps for health promotion, health education, and social change.

Date:
February 23, 2026

Time:
2:00 - 3:00 pm

Location:
Blocker 220 and Zoom

Faculty Host:
Dr. Lu Tang, Director of TAMIDS Data Justice Lab

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Zoom ID:
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Leveraging AI for Misinformation Debunking

This talk presents a program of research examining how such persuasive strategies can be systematically identified, modeled, and leveraged in AI-supported misinformation debunking. Drawing on a systematic review of online health misinformation, we first outline twelve recurring persuasive strategies that characterize misleading health content. We then introduce a novel annotation scheme in which health-related misinformation articles are labeled for persuasive strategy use.

Using this dataset, we compare traditional fine-tuned models (RoBERTa) with large language models (GPT-4), demonstrating that in-context learning with ground-truth persuasive strategy labels substantially improves misinformation detection and enables interpretable, strategy-based explanations. Finally, we report findings from an online experiment testing whether AI-generated persuasive-strategy explanations enhance individuals' ability to discern health misinformation. Results suggest that while AI explanations offer promise, trust, autonomy, and psychological reactance critically shape user effectiveness. The talk concludes by discussing implications for explainable AI, media literacy interventions, and future research on trust building and appropriate reliance on AI systems for health misinformation management.