

Faculty Candidate Seminar – Physical AI*****CONFIDENTIAL*******Advertise within campus only.****Jiachen Li**Asst. Professor of ECE and CS
University of California, Riverside

Tuesday, February 24, 2026

Presentation: 10:30 A.M. – 11:30 A.M.

Q & A: 11:30 A.M. – 12:00 P.M.

MSEE 112

**Toward Trustworthy and Human-Centered Embodied
Intelligence: From Individuals to Teams**

Abstract: Modern intelligent systems, such as service or assistive robots and autonomous vehicles, increasingly operate in human-shared environments. Human behavior in these settings is highly dynamic and uncertain, arising from complex social interactions. As a result, building reliable robot autonomy that can safely operate in human-centric environments requires generalizable interaction modeling and principled uncertainty quantification. Moreover, for humans to understand, accept, and trust robotic technologies, robots must be human-centered, capable of understanding human characteristics and intentions, and providing meaningful explanations of their reasoning, predictions, and actions to developers, users, and stakeholders. In this talk, I will first introduce an uncertainty-aware interactive decision making framework with dynamic relational reasoning for safe and robust human-robot interaction. This framework infers explainable relations among entities and generalizes effectively to unseen, out-of-distribution scenarios. I will then demonstrate how robots can infer human intent and internal states and how multiple robots can cooperate efficiently as a team. I will conclude by outlining a future research vision and broader agenda for advancing trustworthy, human-centered robotics and autonomy.

Bio: Dr. Jiachen Li is an Assistant Professor in the Department of Electrical and Computer Engineering and, by courtesy, the Department of Computer Science and Engineering at the University of California, Riverside. He leads the Trustworthy Autonomous Systems Laboratory (TASL) and is a core faculty member of the Riverside Artificial Intelligence Research Institute and the Center for Robotics and Intelligent Systems. Prior to joining UCR, he was a Postdoctoral Scholar at Stanford University and received his Ph.D. from the University of California, Berkeley. Dr. Li was named an RSS Robotics Pioneer and an ASME DSCD Rising Star. He currently serves as Co-Chair of the IEEE RAS Technical Committee on Robot Learning and as an Associate Editor or Area Chair for more than ten leading journals and conferences. He has also organized multiple workshops at top international venues. His research interests span robotics, trustworthy AI/ML, foundation models, reinforcement learning, control, optimization, and computer vision, with a focus on intelligent autonomous systems operating in human-centered and multi-agent environments.