# Transforming Healthcare Decision Making Using Artificial Intelligence


## Shengpu Tang, PhD

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**Emory University**


Tuesday, March 18, 2025

12:00 – 1:00 PM

BMI Classroom 4004

Woodruff Memorial Research Building

or

Join us on Zoom link:

**https://zoom.us/j/97853703243**

Meeting ID: 978 5370 3243

EMORY UNIVERSITY | Department of Biomedical Informatics, Emory University School of Medicine

**Abstract**: Decision making is at the core of healthcare: clinicians constantly make complex decisions that span diagnosis, treatment, care coordination, and resource allocation. Yet, human decisions are never perfect, leading to suboptimal patient care. My research aims to use AI to augment and improve decision-making in healthcare, following a synergistic approach that combines AI methods with practical, real-world implementation. In this talk, we will explore the two key themes of my research: (1) Application-Inspired AI Innovations, focused on novel AI methods grounded in practical healthcare problems; and (2) Path to Deployment and Impact, addressing AI integration into clinical workflows for real-world improvements. The talk will end with my future vision of human-AI teaming to enable better healthcare.

**Bio:** Shengpu Tang is an assistant professor in the Department of Computer Science at Emory University. He received his PhD in Computer Science and Engineering from the University of Michigan in 2024, after receiving both a BSE and MSE in Computer Science also at University of Michigan. His research focuses on developing and applying artificial intelligence methods to enhance decision making in healthcare, with a particular emphasis on reinforcement learning. He has published articles in premier journals and conferences across both computer science and clinical venues including NeurIPS, ICML, MLHC, BMJ, Health Affairs, JAMIA, and IDWeek. He served as a main organizer for MLHC 2025 and for ML4H 2022-2023, an area chair for RLC 2025 and CHIL 2024-2025, and regularly reviews for top-tier AI venues, including NeurIPS, ICML, ICLR, AAAI, AISTATS, KDD.