



Call for Participation

ASU-Mayo Workshop on Generative AI and Large Language Models: Opportunities and Challenges for Healthcare and Medicine

Generative AI, especially Large Language Models (LLMs), is ushering in a paradigm shift with its revolutionary and disruptive potential across various domains. One of the most compelling and transformative arenas where these advancements are taking center stage is the field of medicine and healthcare. The ASU-Mayo Center for Innovative Imaging (AMCII) is hosting a workshop on Generative AI and Large Language Models: Opportunities and Challenges for Healthcare and Medicine. This event, sponsored by ASU's Fulton Schools of Engineering, is scheduled for **November 18, 2023**. Attendees are also invited to join the AI Day of the School of Computing and Augmented Intelligence on November 17.

Given the rapid strides made in Generative AI and LLMs like ChatGPT, there is a growing imperative to explore their applications in healthcare and confront the unique challenges therein. Can we utilize General Artificial Intelligence (GAI) and Large Language Models (LLMs) to enhance healthcare and medical research? Is it possible for GAI and LLMs to uncover information not explicitly stated in existing literature? If so, how can we ensure the accuracy of such findings? What are the recommended best practices for the safe utilization of GAI and LLMs in these fields? To answer these and many other questions, we extend a warm invitation to researchers, healthcare professionals, data scientists, and industry experts to actively engage in this workshop and contribute to discussions across the following key areas (not limited to):

Applications of LLMs in Healthcare

Ethical Considerations

Validation and Accuracy

Clinical Decision Support

Patient Engagement

Best Practice in Prompt Engineering for

Medical Research

Transparency and Explainability

Reinforcement Learning with Human

Feedback

Can GAI Know Anything New

Validation and Verification of LLMs for

Medical Research

Disinformation and Misinformation in

Healthcare

Medical Imaging

Causal Inference

Current Policy or Institutional Barriers

Novel Challenges and Future Directions

Format of the Workshop: To foster the exchange of ideas, the workshop will primarily adopt the form of plenary panel sessions followed by small-group discussion sessions. This format ensures that every attendee will have an opportunity to contribute and engage in in-depth discussions on the workshop's themes.

Venue & Registration: The full-day Workshop will be conducted in person at *Canopy by Hilton Tempe Downtown*, right by the ASU campus. There is no charge to participate but a registration is needed to reserve your spot. Please email the committee chair at baoxin.li@asu.edu to register and/or apply for a potential travel grant if you need travel support.

Organizing Committee

Baoxin Li, ASU (Chair) Geunyeong Byeon, ASU Huan Liu, ASU Teresa Wu, ASU Imon Banerjee, Mayo Clinic Bhavik Patel, Mayo Clinic Todd J. Schwedt, Mayo Clinic Aaron Lee, Univ. of Washington Ankur M. Teredesai, Univ. of Washington