## **Title**:
Optical architectures for foveated display and imaging technologies

**Abstract:**

Optical technologies fundamentally serve a pervasive role in many of the recent breakthroughs, enabling human-centric virtual and augmented display and human interface technologies as well as advanced optical sensing and imaging technologies. In this talk, I will provide an overview of my group's research portfolio in both wearable displays and biomedical imaging. I will then focus on our recent progress and development of foveated display technologies for virtual and augmented reality systems.

## **Biography:**
Dr. Hong Hua, Fellow of NAI (National Academy of Inventors), SPIE and OPTICA, is currently the Jean M. Bennett OPTICA endowed Chair Professor with the James C. Wyant College of Optical Sciences (OSC), The University of Arizona. She has over 25 years of experiences in designing and developing wearable display technologies for virtual reality and augmented reality applications as well as microscopic and endoscopic imaging systems for medicine. She is the recipient of many awards and honors, including the most recent recognitions as the 2024 American Innovator Award by Bayh-Dole Coalition, as the 2024 Inventor of the Year by University of Arizona, and as a member of the IEEE VGTC VR Academy inducted in 2023. Dr. Hua has published over 300 technical papers and holds 60+ issued US patents and 90+foreign patents in her specialty fields and delivered numerous keynote addresses and invited talks at major conferences and events worldwide.

## **Portrait:**