

## **Describing Images with AI: Challenges and Opportunities for a Real-World Application**

Abstract:

A natural grand challenge for the AI community is to create computer vision models that assist people who are blind to learn about their visual surroundings. That is because people who are blind have relied on human-based image description services to learn about images they take for over a decade. In this talk, I will discuss my team's work on building the first datasets and AI challenges that originate from this population in authentic use cases. I will address questions including: What are the challenges for creating large-scale datasets that represent a real use case? How does data originating from blind people compare to data in mainstream (contrived) datasets? What is the current performance of AI models in delivering the information sought by people who are blind? What are the key AI challenges ahead for supporting real users of visual description technologies? This work offers a valuable foundation for designing more generalized computer vision models that meet a larger diversity of needs for real end users.