IEEE VR 2023
Keynote Speaker

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Creating Virtual AI Beings

Abstract

From Apple's Siri to Amazon's Alexa to Microsoft's Cortana, today we human beings are increasingly sharing the world with AI beings. Eventually, the population of AI beings will be many times more than that of humans. In this talk, I will present some challenges and opportunities in creating AI beings: realism, interaction and embodiment. In particular, I will focus on how we can massively scale up content creation for photorealistic AI beings. For instance, how to make results controllable? How to cross the uncanny valley? How to democratize the creation process? I will show many results using the latest neural rendering technology for creating realistic AI beings. Finally, I will use an example of creating virtual singers to illustrate the state-of-the-art AI beings currently available in the social media and on the market.

Biography

Dr. Shum is the Chairman of Xiaobing.ai. Dr. Shum was previously Executive Vice President of Microsoft's Artificial Intelligence (AI) and Research Division. He led Microsoft Research, the world's premier computer science research lab, and was responsible for driving the company's overall AI strategy and forward-looking research and development efforts and overseeing R&D of AI-focused products including the multilingual web search engine Bing and AI chatbot XiaoIce. Dr. Shum was one of the founding members of Microsoft Research China (later renamed Microsoft Research Asia) and served as the Managing Director and Chief Scientist, helping to cultivate many global leading computer scientists, technical experts and entrepreneurs over the years. Dr. Shum is an IEEE Fellow and an ACM Fellow for his contributions to computer vision and computer graphics. He was elected to National Academy of Engineering of the US in 2017, and Royal Academy of Engineering of the UK in 2018. He received his PhD in Robotics from Carnegie Mellon University.