# IEEE VR 2023 Keynote Speaker



#### Baining Guo Microsoft Research

### Digital Humans in Virtual Environment

#### Abstract

In this talk, I will discuss recent technologies for creating digital humans to populate the virtual environment and their applications in video communication and collaboration. I will cover both photo-realistic humans ("digital doubles") and 3D digital avatars and will share my thoughts about the coming content generation revolution brought by large GPT models (generative pretrained).

## Biography

Baining Guo is a Distinguished Scientist with Microsoft Research. Prior to joining Microsoft in 1999, Baining was a senior staff researcher with Intel Research in Santa Clara, California. Baining received his PhD and MS degrees from Cornell University, and his BS from Peking University. He is a fellow of ACM, IEEE, and Canadian Academy of Engineering.

Baining works in computer graphics, geometric modeling, virtual reality, and computer vision. His research focuses on three areas: DNN models for imaging and 3D graphics, statistical modeling of textures and appearances, and geometric modeling. His work is motivated by applications in the fields of virtual reality, video communication, digital content creation, and video gaming. He served on program committees and advisory boards of most major graphics conferences, including ACM SIGGRAPH, ACM SIGGRAPH Asia, and IEEE Visualization. He was the technical papers chair of ACM SIGGRAPH Asia. He also served on the editorial boards of *IEEE Transactions on Visualization and Computer Graphics, IEEE Computer Graphics and Applications*, and *Elsevier Journal of Computer and Graphics*.

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