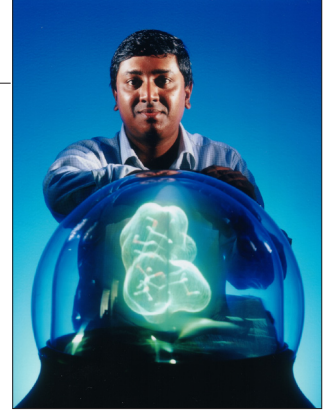# Keynote Address

Why Aren't We Using 3D User Interfaces, and Will We Ever?

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Abstract

Despite decades of interest and research in 3D user interfaces, most of us continue to communicate with our computing technology via primarily 2D interfaces. Even the most sophisticated software that allow artists to create dazzling 3D special effects in movies, or designers to construct sublimely beautiful 3D physical artifacts, rely on 2D interfaces to generate the 3D output. Why? Is all our research into 3D interfaces simply crummy, and hence not worthy of adoption by the broader community? Perhaps the 3D interface research community has simply failed to persuade our industrial colleagues of the value of all this wonderful 3D interface technology? Or maybe 2D interfaces are simply better for most if not all tasks, and researchers are just wasting their time exploring 3D interfaces? Or are there simply technological hurdles, that once surmounted, will finally allow 3D interfaces to flourish? I suspect that the truth lies in a combination of these hypotheses, and in this talk will probe them via examples from the past, present, and near future.

Bio

Ravin Balakrishnan is an Assistant Professor and the Bell University Laboratories Associate Chair in Human-Computer Interaction at the Department of Computer Science, University of Toronto, where he co-directs the Dynamic Graphics Project (DGP) laboratory (www.dgp.toronto.edu). He is also a member of the Knowledge Media Design Institute (KMDI) (www.kmdi.toronto.edu). His research interests include Human Computer Interaction (HCI), Interactive Computer Graphics, Information Visualization, Ubiquitous Computing and pretty much everything else concerning human use of technology. He has recently become particularly interested in flying aircraft and visualizing mammalian anatomy, although he has not yet attempted to do both concurrently. He earned his Ph.D. in Computer Science from the University of Toronto, while concurrently working part-time as a researcher at Alias from 1997-2001.