

2008 ACM SIGGRAPH Awards

Significant New Researcher Award

Maneesh Agrawala



Maneesh Agrawala is this year's recipient of the Significant New Researcher Award. This is in recognition of his outstanding early contributions to computer graphics and interaction techniques, particularly in the area of novel visualization techniques and user interaction models across a range of problem domains.

Maneesh has inspired many to rethink how we should render complex information, an area of increasing societal importance. This was first evidenced by his 2002 Ph.D. at Stanford University on "Visualizing Route Maps," introducing the mapping abstraction of *LineDrive*, which both simplifies and clarifies route maps. He went on to work at Microsoft Research for three years and then moved to the University of California, Berkeley, where he is now an Assistant Professor.

The depth of Maneesh's work comes in part from a thorough study of the techniques and principles artists and graphic designers use to improve the effectiveness of their work. Once common perceptual and cognitive design principles are discovered, Maneesh then finds creative ways to codify these principles in tools for artists, designers, and anyone who wants to explore complex structures and phenomena. Beyond his thesis work on *LineDrive*, Maneesh has applied this approach to a variety of visualization problem domains including visualizing structurally complex 3D models such as architecture, mechanical assemblies and anatomy via cutaways and exploded views; relighting images to enhance shape and detail; and the design of maps for motorists and tourists. The broad applicability of his widely published work to computer graphics and visualization techniques, as well as the fundamental aspects of user interface modeling, has made Maneesh a leader in his field, even at this early point in his career.

In previous SIGGRAPH conferences we saw aspects of his work in another area, that of computational photography. The product of a fruitful collaboration with students and faculty from the University of Washington, these papers included "Digital Photomontage" (2004), "Interactive Video Cutout" (2005), "Panoramic Video Textures" (2005), "Photographing Long Scenes" (2006), "Soft Scissors" (2007) and "Multi-scale Shape and Detail Enhancement" (2007).

Maneesh's work that has appeared at SIGCHI, IEEE Visualization and UIST is similarly wide and deep. Whether focusing on visualizing and interacting with complex information spaces, or automated layout and design problems, Maneesh has always relied on founding his work on perceptual or cognitive principles. His insistence on always keeping the user at the center of any development effort is a powerful one, and one we honor with this award.

Previous Award Recipients

2007 Ravi Ramamoorthi
2006 Takeo Igarashi
2005 Ron Fedkiw
2004 Zoran Popović
2003 Mathieu Desbrun
2002 Steven J. Gortler
2001 Paul Debevec