IEEE VGTC Virtual Reality Technical Achievement Award 2009

The 2009 Virtual Reality Technical Achievement Award goes to Hirokazu Kato of the Nara Institute of Science and Technology, Japan, in recognition of the development of the ARToolkit Library. The IEEE VGTC is pleased to award Hirokazu Kato the 2009 Virtual Reality Technical Achievement Award.

Hirokazu Kato
Nara Institute of Science and Technology

IEEE VGTC Virtual Reality Technical Achievement Award Recipient 2009

BIOGRAPHY

Dr. Hirokazu Kato is a Professor in the Nara Institute of Science and Technology, Japan. He received the B.E., M.E. and Dr. Eng. degrees from Osaka University, Japan in 1986, 1988 and 1996 respectively. He joined the Department of Control Engineering at Osaka University, from 1989 to 1999, where he studied pattern recognition and computer vision. He was also interested in human-computer interaction as an application area of his research. He realized that computer vision can contribute to Augmented Reality as a core technology when he joined the Human Interface Technology Laboratory (HIT Lab) at the University of Washington as a visiting scholar in 1998. During this visit to the HIT Lab, he first met Dr. Mark Billinghurst and started collaborative research with him. In 1999 Dr. Kato joined the Department of Information Machines and Interfaces at Hiroshima City University, Japan. He still continued the collaboration with Dr. Billinghurst and they demonstrated an AR system called 'Shared Space' with HIT Lab members at Siggraph 99 Emerging Technologies. Dr. Kato developed a vision-based tracking library for this system which was later named the ARToolKit. Since the Shared Space was popular with many participants and they were also interested in the technology in the system, he decided to open the ARToolKit library source code.

The ARToolkit has had a significant impact on the growth of Augmented Reality research. When it was developed there was no easy way for researchers to develop AR tracking and interaction solutions. This library enabled a whole new generation of AR researchers to enter the community. The original paper describing the ARToolKit is currently the third most cited paper in AR. Even 10 years after its original development, the ARToolKit is currently one of the most popular computer vision software downloads on Source Forge with over 140,000 downloads in the past four years alone.

In 2003 Dr. Kato joined the Graduate School of Engineering Science at Osaka University. Since 2007 he has been with the Graduate School of Information Science at Nara Institute of Science and Technology. Since developing the ARToolKit, his primary area of research has been Augmented Reality. He has served as a program co-chair for the International Symposium on Mixed and Augmented Reality (ISMAR) in 2006 and 2007 and currently he serves on the Steering Committee of ISMAR. He has also been interested in entertainment computing. He participated in interactive media art projects of Ars Electronica Future Lab, Austria in 2003 and 2004, and contributed to the system development of the projects. He helped establish a new conference on entertainment computing called the International Conference on Advances in Computer Entertainment Technology (ACE) and served as a program co-chair of ACE in 2004, 2005 and 2006.

AWARD INFORMATION

The IEEE VGTC Virtual Reality Technical Achievement Award was established in 2005. It is given every year to recognize an individual for a seminal technical achievement in virtual & augmented reality. VGTC members may nominate individuals for the Virtual Reality Technical Achievement Award by contacting the 2009 awards chair for virtual reality, Larry F. Hodges, at vgtc-vr-awards@vgtc.org.