

The 2017 Visualization Career Award

Charles Hansen

The 2017 Visualization Career Award goes to Charles (Chuck) Hansen in recognition for his contributions to large scale data visualization, including advances in parallel and volume rendering, novel interaction techniques, and techniques for exploiting hardware; for his leadership in the community as an educator, program chair, and editor; and for providing vision for the development and support of the field. The IEEE Visualization & Graphics Technical Committee (VGTC) is pleased to award Charles Hansen the 2017 Visualization Career Award.



Charles Hansen

University of Utah
Award Recipient 2017

BIOGRAPHY

Charles (Chuck) Hansen is an IEEE Fellow, a Professor in the School of Computing, and an Associate Director of the Scientific Computing and Imaging (SCI) Institute at the University of Utah. He received a BS degree from Memphis State University (1981) and a PhD from the University of Utah (1987). He was a PostDoc at Inria in 1987-1988. Professor Hansen has been working on the visualization and analysis of large-scale scientific data since 1989 when he joined the technical staff at Los Alamos National Laboratory (LANL). He founded and led the visualization research group in the Advanced Computing Laboratory at LANL from 1989-1997. He has been on the faculty of computer science at the University of Utah since 1997 and was a founding faculty member of the SCI Institute. He has served as a visiting scientist at Inria, a visiting professor at the University Joseph Fourier and University of Kaiserslautern, and as a SimTech fellow at the University of Stuttgart.

His research has focused on visualization techniques for large-scale visualization and he has developed fundamental algorithms that are widely used in the field such as multi-dimensional transfer functions for volume visualization, various methods for volume visualization, parallel techniques for multi-variate data, and flow visualization. His goal in moving to Utah was to make SCI one of the premier institutes for research in visualization. While at Utah working with his students and postdocs, he has pursued his interest in interactive techniques for visualization and computer graphics. In 2005, VGTC awarded him the Technical Achievement Award. Professor Hansen has published over 160 peer reviewed scientific papers and has been a co-author on three papers recognized with “Best Paper Awards” at the IEEE Visualization Conference (1998, 2001, 2002). He and his students received the Best Paper award at IEEE Pacific Visualization 2010 and received a Best Paper nomination at IEEE Pacific Visualization 2013.

Professor Hansen has made significant contributions to the visualization community. As a leader in the visualization community, Professor Hansen has served on the Editorial Board and as Associate Editor in Chief of *IEEE TVCG* during 2003-2007. *TVCG* reappointed him as an Associate Editor in Chief of *TVCG* in 2014 and he continues in that role. He revised the process for *TVCG* papers presented at IEEE VIS and serves as the *TVCG* liaison for the IEEE VIS conference. He served on the VGTC from 1995-

2002. He served on the IEEE Visualization Conference Steering Committee from 2001-2004 and various positions of the IEEE Visualization conference: Co-Chair in 2000 and 2001, Program Chair in 1997 and 1999, and Papers Co-Chair in 2007 and 2008. He was also Co-Chair of the EUROGRAPHICS /IEEE-CS Symposium on Visualization in 2003-2004, Co-Chair of IEEE Lдав in 2014 and Papers Co-Chair of IEEE Pacific Vis 2016. He was Symposium Co-Chair for the 1996 ACM-SIGGRAPH/IEEE Volume Rendering Symposium and was a founding co-chair for the first ACM-SIGGRAPH/IEEE Parallel Rendering Symposium in 1993. He has served as Guest Editor for *TVCG*, *IEEE Computer Graphics and Applications* and *IEEE Parallel, and Distributed Technology*. He has served on over 60 program committees for major conferences in the fields of visualization and computer graphics. Professor Hansen has served on many white paper committees for NSF, NIH, DOE, IDA and CRA-CCC developing research agendas that have led to funding opportunities in those agencies. He has served on advisory boards for leading research organizations such as LLNL Computational Division, RIVIC, Argonne National Laboratory Computing, Environment and Life Sciences, NIH Centers (CISMM), KAUST Geometric Modeling and Visualization Center, KAUST Visual Computing Center, State-Key-Laboratory for CAD&CG at Zhejiang University.

This award is due to the talented group of students, postdocs, SCI Faculty, and collaborators that have contributed to his success; it would not have been possible without them and the support of his family.

AWARD INFORMATION

The IEEE VGTC Visualization Career Award was established in 2004. It is given every year to recognize an individual for a seminal technical achievement in visualization. VGTC members may nominate individuals for the Visualization Career Award by contacting the awards chair, Holly Rushmeier, at vgtc-vis-awards@vgtc.org.