

The 2011 Visualization Career Award

Frits Post

The 2011 Visualization Career Award goes to Frits Post, Delft University of Technology, in recognition of sustained seminal contributions to the field especially in flow visualization, the international impact he made promoting visualization as a scientific field, and establishing early educational programs in visualization.

The IEEE VGTC is pleased to award Frits Post the 2011 Visualization Career Award.



Frits Post

Delft University of Technology
Award Recipient 2011

BIOGRAPHY

Frits Post was an Associate Professor of Computer Science (computer graphics) at Delft University of Technology; he retired in July 2011. He started working in computer graphics in the 1970s, when he studied Industrial Design Engineering at Delft University of Technology. For his graduation project in the Ergonomics Group (1979), he developed the Anthropometric Design Assessment Program System (ADAPS), an interactive 3D graphics system for workspace design, which has been used and developed further until this very day. In 1982 he moved from Industrial Design Engineering to Computer Science, where he became associate professor in 1987. In 1989 he started research in scientific visualization.

The last two decades he and his students and co-workers have produced many new methods and techniques for visualization. He has been very successful in attracting bright students and guiding them. In the nineties his main topic was flow visualization, where he and his students studied visualization of turbulent flow, particle and texture-based visualization, selective visualization, feature extraction and tracking, and comparative visualization. In the late nineties he became interested in the use of virtual reality techniques for visualization. With his students he developed novel techniques for 3D interaction and exploration of large data sets using a virtual workbench. He also started work on medical visualization, leading to a steady stream of results on volume rendering, virtual endoscopy, computer-aided diagnosis and surgery planning. Most recently, he has worked on very large data handling techniques, interactive visual data analysis, atmospheric physics applications, and geospatial visualization. He has co-authored more than 120 papers, many in top journals such as *IEEE TVCG*, *IEEE CG&A*, *Computer Graphics Forum*, *The Visual Computer*, and for conferences such as IEEE Visualization and VisWeek, EG/IEEE EuroVis, the EG Virtual Environments Symposium, ACM VRST, and MICCAI, and he has edited several volumes of conference proceedings and collections of research papers.

Frits has played a central role in the development and organization of the field, and has been active both in the European and in the US visualization communities. On the European side, he has been an elected member of the Eurographics Executive Committee and Vice Chairman. He was also a chair of the Working Group on Visualization in Scientific Computing until June 2011. He has been member and chair of numerous program committees of Eurographics conferences and workshops and of several best paper award committees. In the US, he was a member of the Executive Committee of the IEEE Computer Society

Technical Committee on Computer Graphics from 1995 to 2000; he has been a member of the papers committees and organizing committees of several IEEE Visualization conferences and symposia, and also organized and presented several tutorials and state-of-the-art reviews, co-organized Dagstuhl seminars; he has been an Associate Editor of *IEEE Transactions on Visualization and Computer Graphics*, *ACM Transactions on Graphics*, and *Computer Graphics Forum*.

Frits was one of the pioneers in promoting visualization research in Europe. In 1991 he organized the second, highly successful European Workshop on Visualization in Scientific Computing in Delft, following up on the first one, held in Paris in April 1990. Frits made a major contribution in fostering strong relations between Eurographics and the IEEE Computer Society Visualization and Graphics Technical Committee. This led to the joint Eurographics/IEEE Symposium on Scientific Visualization held in Vienna in May 1999, which developed later into the highly successful annual EuroVis symposia. EuroVis is currently a vibrant event of which proceedings appear as a special issue of *Computer Graphics Forum* journal, and Frits has made important contributions to its success. A final highlight was his keynote presentation at Eurographics 2011, in which he shared his vision of the field of data visualization and described generic developments. He was recently awarded an Honorary Fellowship of the Eurographics Association in recognition of his contributions to the field of visualization.

AWARD INFORMATION

The IEEE VGTC Visualization Career Award was established in 2004. It is given every year to an individual to honor that person's lifetime contribution to visualization. VGTC members may nominate individuals for the Visualization Career Award by contacting the awards chair, Bill Lorensen, at vgtc-vis-awards@vgtc.org.