

Univ.-Prof. Dr.rer.nat. Dr.techn.h.c. Dr.-Ing.E.h. Thomas Ertl

Current Position

Full Professor, Chair for Visualization and Interactive Systems, Computer Science Department of the University of Stuttgart, Germany

Academic Degrees

1976-1980 Study of Physics and Computer Science, University of Erlangen-Nürnberg
1980-1982 Study of Computer Science at the University of Colorado, Boulder, USA
1982 Master of Science in Computer Science, University of Colorado, Boulder, USA
1988 PhD at the Faculty of Physics at the University of Tübingen
2011 Honorary Doctorate of the University of Technology, Vienna, Austria
2014 Honorary Doctorate of the University of Magdeburg, Germany

Professional and Academic Career

1983 - 1991 Researcher at the Institute for Theoretical Astrophysics, University of Tübingen
1992 - 1992 General Manager science+computing GmbH, Tübingen (1989-2000 part-time)
1994 - 1999 Professor (C3) for Computer Graphics and Visualization at the Institute for Computer Science IX at the University of Erlangen-Nürnberg
since 1999 Professor (C4) for Practical Computer Science at the University of Stuttgart
2000-2006 Head of Research and Innovation and Member of the Board of science+computing ag (part-time)
2006-2008 Member of the Supervisory Board of science+computing ag
since 2002 Director of the Institute for Visualization and Interactive Systems (VIS)
since 2006 Director of the Visualization Research Center of the University Stuttgart (VISUS)
2006-2010 Vice-Dean of the Faculty for Computer Science and Electrical Engineering
2013-2015 Dean of the Faculty for Computer Science and Electrical Engineering
since 2015 Vice-President for Research and Advanced Graduate Education

Awards

- PhD Scholarship of the Studienstiftung des Deutschen Volkes (1984-1986)
- Outstanding Technical Contribution Award 2006 of the Eurographics Association
- Technical Achievement Award 2006 of the IEEE Technical Committee Visualization and Graphics (VGTC)
- Outstanding Service Award 2010 of the IEEE Technical Committee Visualization and Graphics (VGTC)
- Regular Member of the Heidelberger Academy of Sciences (since 2007)

Research Areas

- Scientific Visualization and Visual Analytics
- Computer Graphics, especially GPU-based Algorithms
- Human-Computer Interaction, especially for the sensorial disabled

Publications

Co-author of more than 500 peer-reviewed scientific publications.
h-index: 52, more than 11000 citations in total (Google Scholar)

Projects (third-party funding)

Funding by the German Research Foundation (DFG) and by German Federal Ministry of Research (BMBF), State of Baden-Württemberg, European Union, and Industry.

Current Collaborative Projects:

DFG Excellence Cluster EXC 310 *Simulation Technology* (SimTech)
DFG Graduate School GSC 262 *Advanced Manufacturing Engineering* (GSaME)
DFG SFB 716 *Dynamic Simulation of Systems with Large Number of Particles*

DFG SFB/Transregio 75 *Droplet Dynamics under Extreme Ambient Conditions*
DFG SFB/Transregio 161 *Quantitative Methods for Visual Computing*
DFG Priority Program SPP 1335 *Scalable Visual Analysis Techniques*
DFG Priority Program SPP 1648 *Software for Exascale*
BMBF HONK: *Industrial Numerics for Complex Flows in Hydraulic Systems*
BMBF VASA: *Visual Analytics for Security Applications*
BMBF ePoetics: *Corpus Development and Visualization of German poetics*
EU iPatDoc: *Workbench for Interactive Contrastive Analysis of Patent Documentation*

Scientific Leadership

Principal Investigator and Member of the Directorate of the Cluster of Excellence „Simulation Technology“ at the University of Stuttgart (since 2007)
Principal Investigator of the Graduate School „Advanced Manufacturing Engineering“ at the University of Stuttgart (since 2007)
Vice Coordinator of the DFG Collaborative Research Center 716 “Dynamic Simulation of Systems with Large Number of Particles” at the University of Stuttgart (since 2006)
Member of the Steering Committee of the DFG Priority Program „Scalable Visual Analysis Techniques“ (2008)
Steering Committee IEEE Visualization Conference (2004-2011)
Steering Committee Eurographics Working Group on Data Visualization (2003-2012)
Steering Committee IEEE Visual Analytics Science and Technology (2008-2010)
Editor-in-Chief of the IEEE Transactions on Visualization and Computer Graphics (2007-2010)
Editorial Board IEEE Transactions on Visualization and Computer Graphics (2003-2006)
Paper Co-Chair: Eurographics 2012, IEEE PacificVis 2009, IEEE VAST 2008, EuroVIS 2006, IEEE VolVis 2004, IEEE Visualization 2000/2001
Conference Chair: PacificGraphics 2016, IEEE PacificVis 2011, Volume Graphics 2005/2006, Graphics Hardware 2002, Dagstuhl SciVis Seminar 2003/2005, Vision, Modelling, and Visualization 2001

Advisory Boards, Reviewing, Academic Roles

Member of the Computer Science Review Board of the DFG (since 2012)
Member of the ERC Advanced Grant Panel Computer Science 2011, 2013, 2015
Scientific Advisory Board VRVis, Vienna (since 2001)
Scientific Advisory Board Science Campus Tübingen (since 2011)
Chairman Scientific Advisory Board Welsh Research Institute of Visual Computing (2009-2014)
Advisory Board des Max-Planck-Centers for Visual Computing (2004-2009)

Reviewer for the DFG, the Federal Ministry for Education and Research, the European Union, the Austrian FWF, the Canadian NSERC, the Research Council of Norway, the Dutch National Science Foundation, and others.

Executive Committee of the Eurographics Association (since 2004)
Vice Chairman of the Eurographics Association (2007-2010)
Chairman of the Eurographics Association (2011-2012)

Head of the Examinations Committee Computer Science & Software Engineering (2002-2006)
Member of the Senate Committee on Research, University of Stuttgart (2006-2008, 2010-2012)

Dissertations and Habilitations

1 Habilitation and 45 PhD Dissertations supervised, additionally 45 PhD Dissertations co-supervised, currently 15 PhD researchers