

CV Dr. Susanne Krömker

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Date and place of birth: April 20, 1964 in Osnabrück, Germany
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Professional career

2004 to date Head of main research group *Visualization and Numerical Geometry* (vNKG) at IWR (permanent position)
2007 – 2009 Head of Junior Research Group Computer Graphics of the Heidelberg Graduate School *Mathematical and Computational Methods for the Sciences* (HGS MathComp)
1998 – 2004 Scientific Assistant at IWR (C1)
1997 Doctorate in Mathematics (Dr. rer. nat.), Ruprecht-Karls-Universität Heidelberg
1993 – 1997 Scientific Employee of SFB 359
1994 – 1997 Member of the Graduate College at IWR
1991 – 1992 Scientific Employee of SFB 123
1991 Diploma in Mathematics, Ruprecht-Karls-Universität Heidelberg
1984 – 1991 Study of Mathematics and Chemistry in Heidelberg
1983 – 1989 Scholarship of the Studienstiftung des deutschen Volkes
1983 – 1984 Study of Mathematics and Business Management in Osnabrück

Third party funding

DFG-SNF (D-A-CH) Project, 2014 - 2016, *Improving Limited Angle X-ray computed Tomography by Optical data integration (ILATO)*
FRONTIER Project, 2008 - 2010, *Synchronous Generation of Language and 3D-Scenes: Instructional Discourse (SightSee)*
BMBF Project, Grant 03WNX2HD, 2002 - 2005, *Mathematical Concepts and Computer Graphics for the Reconstruction of Stalactite Vaults - Muqarnas - in Islamic Architecture*
SFB 359, 2001 - 2004, *Reactive Flow, Diffusion and Transport: Project E, Visualization with Volume Rendering*

Workshops and Summerschools

Workshop on *Computer Graphics*, Royal University of Phnom Penh, Cambodia (2017)
AIMS Summerschool on *Scientific Computing*, Capetown, South Africa (2017)
Workshop on *Scientific Computing*, Kyoto University (Kyodai), Kyoto, Japan (2015)
Ladenburger Diskurs *Digitales Modell Kloster Lorsch*, Ladenburg, Germany (2015)
Workshop on *Scientific Computing*, Hebrew University, Jerusalem, Israel (2012)
Workshop on *Scientific Computing*, Jiao Tong University, Shanghai, China (2010)
Conference on *Trends in Nonlinear Analysis*, Heidelberg University, Germany (2000)

Teaching activities

Computer graphics I & II (lectures in both English and German)
Praktische Geometrie (lecture)
Einführung in die Geometrie (lecture)
Visualisierung im Bereich Cultural Heritage (lecture)
Diskrete Morsetheorie (Seminar)
Rechtliche und gesellschaftliche Aspekte von Daten und Bildern (Seminar)
Topologische Methoden in der Computergraphik (Seminar)
Softwarepraktikum Computergraphik

Acted as supervisor

All doctoral students officially supervised by Prof. Willi Jäger, Prof. Georg Bock or Prof. Gerhard Reinelt as indicated

Andreas Beyer (Bock, 2016)

Data Fusion of Surface Meshes and Volumetric Representations

Hubert Mara (Jäger, 2012)

Multi-Scale Integral Invariants for Robust Character Extraction from Irregular Polygon Mesh Data

Pheakdey Nguonphan (Jäger, 2009)

Computer Modeling, Simulation and Visualization of Angkor Wat Style Temples in Cambodia

Pau Montes (Jäger, 2006)

Dynamic cone-beam reconstruction for perfusion computed tomography

Silvia Harmsen (Reinelt, 2006)

Algorithmic Computer Reconstructions of Stalactite Vaults - Muqarnas - in Islamic Architecture

Diploma, Master theses, and state examination theses

Benjamin Zimmermann (2018)

Sophea Wiesenfarth-Chan (2017)

Jonathan Wüst (2016)

Christina Cater (2015)

Markus Schaber, Sokchea Kor (2014)

Daniel Wunderlich, Julia Freudenreich (2012)

Jan Hering, Julia Portl, Bastian Rieck, Lenka Debreova, Katarina Boland (2010)

Jens Fangerau (2009)

Bachelor theses

Saoud Asla (2018)

Patrick Zirjacks, Stephan Vedder, Ömercan Yazici (2017)

Tristan Klemm, Christoph Gärtner, Guan Teck Gan (2016)

Niels Bernlöhr, Philipp Rettig (2015)

Lisa Kolb (2013)

Markus Helbig, Marcus Krause, Philipp Stekl (2011)

Robert Kreuzer, Sebastian Bechtold (2010)

Christoph Hoppe, Benjamin Rommel (2008)

Martin Gangkofer (2005)

References

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- Bechtold, Sebastian, Susanne Krömker, Hubert Mara & Bettina Kratzmüller (2010). Rollouts of Fine Ware Pottery using High Resolution 3D Meshes. In Alessandro Artusi, Morwena Joly, Genevieve Lucet, Denis Pitzalis & Alejandro Ribes (Eds.), *Proc. VAST Int. Symposium on Virtual Reality, Archaeology and Cultural Heritage*, pp. 79–86. Palais du Louvre, Paris, France: Eurographics Association.
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- Beyer, Andreas, Yu Liu, Hubert Mara & Susanne Krömker (2015). Mesh Reduction to Exterior Surface Parts via Random Convex-Edge Affine Features. In *Lecture Notes in Computer Science*. Berlin, Heidelberg: Springer.
- Beyer, Andreas, Hubert Mara & Susanne Krömker (2014). *ILATO Project: Fusion of Optical Surface Models and Volumetric CT Data*. *CoRR*, abs/1404.6583.
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- Hoppe, Christoph & Susanne Krömker (2013b). Towards an Automated True Color Projection onto Adaptively Reduced Point Data from 3D Surface Laser Scans. In *Scientific Computing and Cultural Heritage, Contributions in Mathematical and Computational Sciences, Volume 3*, pp. 21–29. Berlin, Heidelberg: Springer.
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- the examination of cultural material. In *Craft and science: International perspectives on archaeological ceramics*. UCL Qatar Series in Archaeology and Cultural Heritage, 1.
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