

Zentai Laszlo

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Dátum: 2015. március 13. 20:05
Címzett: <sg@icaci.or>; <lzentai@caesar.elte.hu>
Melléklet: Weitergeleitete Nachricht.eml
Tárgy: ICA EC Nomination Germany

Dear László,

I am herewith in my capacity as German National Delegate to ICA officially nominating Monika Sester as German candidate as ICA EC Member.

A nomination on official paper can still be sent to you, if needed.

Attached to this email of mine are the application motivation and the CV of Monika Sester.

Best regards,

Manfred Buchroithner
German National Delegate to ICA

Application for position in the ICA Executive Committee 2015-2019

I hereby want to apply for a position in the Executive Committee of the ICA.

Coming from a geodetic background, I did my PhD in Spatial Data Interpretation using Machine Learning. My habilitation was on automation of generalization processes. Dealing with this topic brought me to the ICA, namely the Commission on Generalization in 1998. I have been active in that commission since then, in participating in workshops, contributing to tutorials, and to two edited books. Working at a photogrammetric institute lead my path to the national and international society of photogrammetry, where I have served as working group chair till today. In that function, I have been also active in collaborating with ICA, e.g. by organizing joint workshops.

Since 2002 I am serving as the head of the local section Lower Saxony of the German society for Cartography. In this function, I am organizing talks, excursions, as well as workshops and conferences. Furthermore, I am heading the German Working group on Automation in Cartography, GIS and Photogrammetry (AgA) since 2002. The main activity of AgA is the annual organization of a 2-day workshop, which brings together people from academia, administration and companies, dealing with spatial data processing.


The research activities of my institute tackle diverse topics in cartography and geoinformatics (especially automation in generalization, data integration, data interpretation, VGI, space-time-modelling, trajectories).

The activities in the ISPRS and the ICA lead to my deep conviction, that joining forces is very relevant and will lead to more than just the sum of separate activities.

Thus, if I have the honor of being elected, I would like to strengthen joint activities between the sister societies, which work with spatial data. Furthermore, I want to contribute in promoting the proceedings of the ICA as high level publication outlets for the researchers in cartography and GIScience. This is an ever important issue that researchers find appropriate journals and conferences to present their best work within the society. Another topic of my interest is the education of students on an international level. There are several options to strengthen this, e.g. encouraging the development of course material (e.g. MOOCs), organization of summer schools, or enabling short term students exchange (e.g. for project works).

I would be happy to serve the society and I am willing to devote adequate time for this.

Hannover, 8. 3. 2015



Monika Sester

Curriculum Vitae



Name Monika Sester
born 19. September 1961 in Gengenbach, Baden-Württemberg,
Germany

Languages German, English, French

Position Professor and Director of the Institute for Cartography and Geo-
informatics at Leibniz Universität Hannover

Address Appelstraße 9a
D-30167 Hannover
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Private Address Groß-Buchholzer Kirchweg 17
30655 Hannover
Tel. +49 (0)511 7684 303

Education

1968–1981: primary and secondary education in Reichenbach and Gengen-
bach (Gymnasium)

21. May 1981: high school graduation (Abitur)

University Education

1981–1987 Study of Geodesy at the University of Karlsruhe/Germany
June 1987 Degree of a Diploma Engineer (Dipl.-Ing.)
24. Feb. 1995 Doctoral Degree with PhD-Thesis on “Learning Structural Models
for Image Interpretation” (in German). Supervisors: Prof. Dr.-Ing.
Dieter Fritsch, Prof. Dr.-Ing. Wolfgang Förstner
28. July 2000 Habilitation: ‘Multiscale Representations for digital spatial data
sets’ (in German). Supervisors: Prof. Dr.-Ing. Dieter Fritsch, Prof.
Dr.-Ing. Wolfgang Möhlenbrink, Prof. Dr.-Ing. Lorenz Hurni

Work Experience

1987–1988	Research Assistant at the Institute of Photogrammetry and Remote Sensing at the University of Karlsruhe (Prof. Bähr)
1988–1994	Research Assistant at Institute of Photogrammetry at University of Stuttgart in the special research programme of German Science Foundation (SFB 228) 'High Precision Navigation' with Prof. Dr.-Ing. Fritz Ackermann and Prof. Dr.-Ing. Dieter Fritsch
1994–2000	Assistant Professor and head of the research group 'Geographical Information Systems' at the Institute of Photogrammetry at Stuttgart University
1997 (09-12)	Guest Researcher at the Department of Geomatics of the Ohio State University, Columbus, Ohio, USA (Prof. Toni Schenk)
since Nov., 2000	Professor and Director of the Institute of Cartography and Geoinformatics, Leibniz Universität Hannover.

Awards

1987	Award of the city of Karlsruhe for the best Diploma-thesis on 'Design and implementation of an expert system for close range photogrammetric data acquisition (Entwurf und Implementierung eines Expertensystems für die Photogrammetrische Bauaufnahme)'
1989	Award of the German Society for Pattern Recognition for 'Object location based on uncertain models' (together with Prof. Dr.-Ing. W. Förstner, University of Bonn)
1998	Hansa-Luftbild-Award: Award of the German Society for Photogrammetry and Remote Sensing (DGPF) for 'Knowledge acquisition for the automatic interpretation of spatial data (Wissenserwerb für die automatische Interpretation digitaler Daten)'
1998	Tewksbury Fellow of the University of Melbourne, Department of Geomatics
2004	President's Honorary Citation of the International Society for Photogrammetry and Remote Sensing for chairing Working Group IV/3 2000-2004
2008	Best Remote Sensing Paper Award, Agile Conference, Girona, Spain
2008	President's Honorary Citation of the International Society for Photogrammetry and Remote Sensing for chairing Working Group II/3 2004-2008

Research Activities

Research on automation of spatial data handling and processing; Concentration on generalization, automatic data analysis, visualization, as well as data integration. Research projects at Institute for Cartography and Geoinformatics at Leibniz Universität Hannover include the following topics:

- ▷ Topographic Modelling
- ▷ 3D-City Modelling
- ▷ Pedestrian Navigation
- ▷ Data Generalization
- ▷ Data Interpretation and Spatial Data Mining
- ▷ Multiple Representation and Multiscale Databases
- ▷ Data Integration, Fusion and Homogenization
- ▷ Small Display Cartography

Projects at Leibniz Universität Hannover, externally funded (since 2001)

2001 - 2004	GiMoDig: Realtime harmonization and generalization of spatial data, EU, 1.11.2001 - 31.12.2004, 1 Research Assistant (RA) BATIIa fulltime, 3 Person Years (PY), 315.800 €.
2001 - 2005	Development of (semi-) automatic methods for the interpretation, analysis and visualization of spatial data, Landesbetrieb für Geobasisdaten Niedersachsen (LGN), 1.7.2001 - 31.06.2005, 1 RA BATIIa fulltime, 4 PY, 295.000 €.
2002 - 2011	Development of a concept and a prototype for the modelling and management of spatial data in an MRDB, Bundesamt für Kartographie und Geodäsie (BKG), Frankfurt), 1.1.2002 - 31.12.2011, 1 RA BATIIa fulltime, 10 PY, 700.000 €.
2002 - 2005	SPIRIT: Web-Search Engine for spatial data, EU, 1.7.2002 - 30.6.2005, 2 RA BATIIa fulltime, 6 PY, 577.198 €.
2002 - 2006	ELAN - E-Learning Academic Network Niedersachsen: development of learning modules and a 'virtual landscape', Land Niedersachsen, 1.10.2002 - 31.12.2006, 1 RA BATIIa fulltime, 4 PY, 194.000 €.
2002 - 2006	GIN- Geoinformatik in Niedersachsen, Land Niedersachsen, 1.10.2002 - 31.12.2006, 1 RA BATIIa fulltime, 1 PY, 57.000 €.
2002 - 2004	Development of methods for a heat demand map based on laser scanning data, Arbeitsgemeinschaft Fernwärme, Frankfurt, 1.8.2002 - 31.3.2004, 1 RA BATIIa fulltime, 111.875 €.
2002 - 2005	Development of methods for the integration of heterogeneous data sets, Geotechnologien, BMBF/DFG, 1.10.2002-31.9.2005, 1 RA BATIIa fulltime, 3 PY, 203.000 €.
2002 - 2009	Project of Dr. Claus Brenner, Junior Research Group of VolkswagenStiftung, allocated at ikg: Methods for fusion, reduction and interpretation of geodata, 1.9.2002 - 30.8.2008, 1 RA BAT1b fulltime, 2 RA BATIIa fulltime 1.3 Mio €.
2003 - 2004	Development of methods for the terrain generalization, Technion-Niedersachsen-Gesellschaft, 1.1.2003 - 31.12.2004, 0.5 RA BATIIa, 50.000 €.
2003 - 2006	Development of learning material Geoinformatics (FerGI), Bund-Länderkommission, 1.10.2003 - 30.9.2006, 0.5 RA BATIIa, 85.500 €.
2004 - 2007	Development of methods for data update in a Multiple-Representation Database (MRDB), DFG, 1.1.2004 - 31.12.2007, 1 RA BATIIa fulltime, 4PY, 267.000 €.
2006 - 2008	Landmark-based navigation of pedestrians on arbitrary data, DFG, 1.6.2006 - 31.05.2008, 1 RA BATIIa fulltime, 3PY, 170.000€.

2006 - 2010	Automatic methods for semantic and geometric transformation of spatial data, DFG, 1.6.2006 - 31.05.2010, 1 RA BATIIa fulltime, 4PY, 267.000 €.
2007 - 2008	Usable and well-scaled mobile maps for consumers, RGI (The Netherlands), Cooperation with TU-Delft, 1.1.2007 - 31.12.2008, 0.8 PY, 48.000 €.
2006 - 2008	Development of a heat demand map for the Federal Republic of Germany, Arbeitsgemeinschaft Fernwärme, Frankfurt, 1.12.2006 - 31.5.2008, 1 RA BATIIa fulltime, 1.5 PY, 149.513 €.
2007 - 2010	GDIGrid – linking Grid Computing and Geodatainfrastructures, BMBF, 15.7. 2007-14.7.2010, 1 RA TVL13 fulltime, 3 PY, 181.200€.
2008 - 2009	Project 'Security', Leibniz Universität Hannover, 1.1. 2008-31.12.2009, 0.5 RA TVL13, fulltime, 1 PY, 60.000 €.
2008 - 2008	Project 'Dynamic Maps', VW Nutzfahrzeuge Hannover, 1.1. 2008-31.12.2008, 1 RA TVL13, fulltime, 1 PY, 100.000 €.
2009 - 2014	Spatial data integration, Landesbetrieb für Geobasisdaten in Schleswig-Holstein and Niedersachsen, 0.5 RA TVL E13 fulltime, 125.000 €.
2008 - 2012	EU-Cost-Project: Semantic Enrichment of 3D City Models for Sustainable Urban Development.
2010 - 2012	EU-Cost-Project: MOVE - knowledge extraction from massive amounts of data about moving objects.
2010 - 2013	Determination of Movement Patterns from trajectories, BMBF, 1.4.2010 - 31.3.2013, 1 RA TVL E13 fulltime, 3PY, 161.000 €.
2011 - 2013	Q-Trajectories, DFG, 15.1.2011 - 14.1.2013, 1 RA TVL E13 fulltime, 2PY, 120.000 €.
2011 - 2015	RainCars: Determination of rainfall using distributed network of cars, DFG, 1 RA TVL E13 fulltime, 4PY, 240.000 €.
2014 - 2018	DFG Graduate Research Programm SocialCars, 2 RA TVL E13, 4.5 PJ, 700.000 €.
2014 - 2016	Extraction of Traffic Relevant Information from Trajectories, IAV Gifhorn, 1 RA TVL E13, 3 PJ, 180.000 €.
continuous	Projects in collaboration with authorities and companies in the domain of terrain modelling, automatic generalization, 3D City Modelling, 25.000€ per year.

Additional Projects

Generalization of 3D-buildings

Development of automatic processes for cartographic generalization: products CHANGE, PUSH and TYPIFY

Development of software for DTM-modelling: the product TASH

Lectures

Lectures in Geographical Information Systems, Cartography, Topography, Computational Geometry: advanced classes and practical courses for students in the disciplines geodesy and geoinformatics, computer science, geography, geosciences, and landscape modelling.

Tutorials

Organisation / Co-Organisation of the following tutorials:

“Digital Image Processing” (Photogrammetric Week 1993, Stuttgart/ Germany), 1993.

Invited lecturer for conducting a Tutorial on GIS Data Capture at AM/FM Asian conference on GIS, Bangkok/Thailand, 1995.

“Geographical Information Systems” (Photogrammetric Week 1995, Stuttgart/ Germany), 1995.

“Digital Image Analysis in Small Scale Imagery”, ISPRS Congress, Vienna/Austria, 1996.

Facility Management Systems (Gebäudeinformationssysteme), (Technische Akademie Esslingen), 1996.

Tutorial Geo-Information Systems, Informatikverbund Stuttgart (IVS), 1997.

Tutorial Geo-Informationssysteme, Berufsakademie, Esslingen, 1998 und 1999.

Image 2000 – Workshop on 3D Virtual Cities and 3D Geospatial Information Systems, 18-20 September, 2000, University of Queensland, Department of Geographical Sciences and Planning, Australia, 2000.

Workshop for the Development of a competence network for land management, GTZ and University of Hannover, 2002.

Tutorial on Automatic Generalization of Spatial Data, 1.-2. December 2005, Helsinki, 2005.

Tutorial on Automatic Generalization, ICA Working Group on Generalization and Multiple Representation, La Coruna, 2005.

Tutorial on Automatic Generalization, ICA Working Group on Generalization and Multiple Representation, Moscow, 2007.

GIS Updating from Imagery and Collateral Data Sources (Convenor, Ch. Heipke), ISPRS Congress, Beijing, 2008.

Supervisor, Co-Supervisor, or Examiner of PhD and Habilitations

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| 2001 | Dipl.-Geogr. Matthias Bader: “Energy Minimization Methods for Feature Displacement in Map Generalization“, University of Zürich, Switzerland, Examiner.
Dipl.-Ing. Ulrich Lenk: “2.5D-GIS und Geobasisdaten – Integration von Höheninformation und Digitalen Situationsmodellen“, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
Dipl.-Ing. Manuel Weindorf: “Regelbasierte Interpretation von unstrukturierten Vektorkarten“, Faculty of Civil Engineering and Geodesy, University Fridericiana Karlsruhe (TH), Examiner. |
| 2002 | MSc. Lifan Fei: “A Method of Automated Cartographic Displacement - on the Relationship between Streets and Buildings“, Faculty of Civil Engineering and Geodesy, Leibniz Universität Hannover, Supervisor. |

- 2003
- Dipl.-Geogr. Alessandro Cecconi: "Integration of Cartographic Generalization and Multi-Scale Databases for Enhanced Web Mapping", University of Zürich, Examiner.
- Dipl.-Inform. Karl-Heinrich Anders: "Parameterfreies hierarchisches Graph-Clustering Verfahren zur Interpretation raumbezogener Daten", Faculty of Air and Space Technology and Geodesy, University Stuttgart, Examiner.
- Dipl.-Ing. Bernd-Michael Straub: "Automatische Extraktion von Bäumen aus Fernerkundungsdaten", Faculty of Civil Engineering and Geodesy, Leibniz Universität Hannover, Examiner.
- Jan van Smaalen: "Automated Aggregation of Geographic Objects. A New Approach to the Conceptual Generalisation of Geographic Databases", University of Wageningen, Netherlands, Examiner.
- 2004
- Dipl.-Phys. Oliver Stahlhut: "Textursynthese und -analyse für Anwendungen der Kartographie und Luftbildauswertung", Faculty of Electrical Engineering, Leibniz Universität Hannover, Examiner.
- Dipl.-Geogr. Tumasch Reichenbacher: "Mobile Cartography - Adaptive Visualization of Geographic Information on Mobile Devices", Faculty of Civil Engineering and Geodesy, Technical University Munich, Examiner.
- Dipl. Ing. Murat Çelikoyan: "Monitoring and analysis of landuse changes in historical periods for the city of Istanbul by means of aerial photography and satellite imagery", Technical University Istanbul, Turkey, Examiner.
- 2005
- Dipl.-Inform. David Skogan: "Multi-Resolution Geographic Data and Consistency", University of Oslo, Norway, Examiner.
- 2006
- Dipl.-Ing. Birgit Elias: "Landmarkenbasierte Navigation", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- Dipl.-Ing. Andreas Koch: "Semantische Integration von zweidimensionalen GIS-Daten und Digitalen Geländemodellen", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Geogr. Michael Lutz: "Ontology-based Discovery and Composition of Geographic Information Services", University of Münster, Examiner.
- Dipl.-Geogr. Steffen Volz: "Modellierung und Nutzung von Relationen zwischen Mehrfachrepräsentationen in Geoinformationssystemen", Faculty of Air and Space Technology and Geodesy, University Stuttgart, Examiner.
- Dipl.-Ing. Florian Sayda: "Zur Aktualisierung von Geodaten eines LBS unter Einbeziehung der Nutzer", University of the Armed Forces, München, Examiner.

- 2007
- Dr. rer. nat. Gerhard Gröger: "Konsistente Modellierung virtueller Städte und Regionen", Habilitation, University of Bonn, Examiner.
- Dipl.-Umweltwiss. Katrin Stroemer: Nutzerbasierte Adaption des Fahrradroutingplanungsprozesses im Internet auf Basis einer empirischen Untersuchung, University of Osnabrück, Examiner.
- Dipl.-Ing. Mark Hampe: "Integration einer multiskaligen Datenbank in eine mobile Webservice-Architektur", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- Dipl.-Ing. Frauke Heinzle: "Mustererkennung in Straßennetzwerken - Verfahren zur Interpretation von Vektordaten", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- Dipl.-Inform. Martin Kada: "Zur maßstabsabhängigen Erzeugung von 3D-Stadtmodellen", Faculty of Air and Space Technology and Geodesy, University Stuttgart, Examiner.
- Dr. Dirk Burghardt: "Automated generalization in digital and mobile cartography", Habilitation, Mathematisch-naturwissenschaftlichen Fakultät der Universität Zürich, Switzerland, Examiner.
- 2008
- M.Sc. Özgün Akcay: "An ontological approach to relevant visualization in mobile GIS", Technical University Istanbul, Turkey, Examiner.
- Dipl.-Ing. Matthias Butenuth: "Network Snakes", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- M.Sc. Mehdi Ravanbakhsh: "Road Junction Extraction from High Resolution Aerial Images Assisted by Topographic Database Information", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Mr. M.E. Awase Khirni Syed: "Exploratory Representations for Geographic Information Retrieved from the Internet", Mathematisch-naturwissenschaftlichen Fakultät der Universität Zürich, Switzerland, Examiner.
- Dipl.-Ing. Jan-Henrik Haurert: "Aggregation in Map Generalization by Combinatorial Optimization", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- 2009
- Dipl.-Geogr. Christiane Katterfeld: "Interoperables Geodatenbasiertes E-Learning", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- Dipl.-Ing. Janet Heuwold: "Automatische auflösungsabhängige Anpassung von Bildanalyse-Objektmodellen am Beispiel Straßen", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.

- 2010 M.Sc. Seyed Mohammed Tavakkoli Sabour: "Multi-temporal classification of crops using ENVISAT ASAR data", Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing. Christian Lucas: "Modellierung verbal repräsentierter Geoinformation - im Anwendungsbeispiel des Katastrophenmanagements", Karlsruher Institut für Technologie (KIT), Examiner.
- M.Sc. Bo Mao (Licentiate): "Visualisation and Generalisation of 3D City Models", KTH, Stockholm, Examiner.
- M.Sc. Mingzheng Shi: Detecting Change in an Environment, University of Melbourne, Examiner.
- 2011 Dipl. Eng. Abdalla Alobeid: Matching algorithms for urban DSM generation from very high resolution satellite stereo images, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing. Jens Göpfert: Snakes for the Adaptation of GIS Road and River Objects to Airborne Laser Scanning Data, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing. Anne Grote: Automatic road network extraction in suburban areas from aerial images, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing. Jan Dirk Wegner: Detection and height estimation of buildings based on fusion of one SAR acquisition and an optical image, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing., M.Sc. Michael Wittke: Dynamic Reconfiguration Methods for Active Camera Networks, Faculty of Computers Science and Electrical Engineering, Leibniz Universität Hannover, Examiner.
- M.Sc. Bo Mao (PhD): Visualisation and Generalisation of 3D City Models, KTH, Stockholm, Examiner.
- M.Sc. David Siriba, Quality improvement of Cadastral Data using Data Integration and Conflation, Faculty of Civil Engineering and Geodetic Science, Supervisor.
- M.Sc. Martijn Meijers, Vario-scale Geoinformation, TU Delft, Examiner.
- 2012 M.Sc. Tassilo Glander, Multi-Scale Representations of Virtual 3D City Models, Hasso Plattner Institut, Universität Potsdam, Examiner.
- Dipl.-Geogr. Julian Hagenauer, Artificial Neural Networks: Methods and Applications in Spatial Data Mining, Universität Heidelberg, Examiner.
- Dipl.-Ing. Annette Hey, Untersuchungen zur automatisierten Visualisierung statistischer Geodaten mittels Punktmethode, Universität Rostock, Examiner.

- Dipl.-Ing. Mario Kluge mit dem Thema: Einsatz von Augmented Reality in der Fußgängernavigation, Universität Potsdam, Examiner.
- 2013 M.Sc. Shuang He, Production and Visualization of Levels of Detail for 3D City Models, Université de Nantes, Examiner.
- M.Sc. Richard Guercke: Optimization Aspects in the Generalization of 3D Building Models, Faculty of Civil Engineering and Geodetic Science, Supervisor.
- M.Sc. Thijs van Lankveld: Large Scale Shape Reconstruction from Urban Point Clouds, Universität Utrecht, Examiner.
- M. Sc. Muhamad Al Rajhi: A Semi-Automatic procedure for Orthophoto Generation from High Resolution Satellite Imagery, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- 2014 Dr.-Ing. Jan-Henrik Haunert: An Algorithmic Approach to Geographic Information Science, Habilitation, Fakultät für Mathematik und Informatik der Universität Würzburg, Examiner.
- Dipl.-Ing. Stefan Werder: Integrität von Geodaten, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.
- M.Sc. Gholam Reza Dini: Toward an automatic solution for updating building databases using spaceborne stereo imaging, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- Dipl.-Ing. Marcel Ziems mit dem Thema: Automatic verification of road databases using multiple road models, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Examiner.
- M.Sc. Myeonghun Jeong: Qualitative Characteristics of fields monitored by a resources-constrained geosensor network, Melbourne University, Examiner.
- M.Sc. Lijuan Zhang: Interpretation of GPS Trajectories, Faculty of Civil Engineering and Geodetic Science, Leibniz Universität Hannover, Supervisor.

Activities in national and international organizations, committees, and societies

Memberships

- 1996 - Member German Society for Photogrammetry, Remote Sensing and Geoinformation (Deutsche Gesellschaft für Photogrammetrie, Fernerkundung und Geoinformation (DGPF))
- 1996 - Member German Society for Computer Science (Deutsche Gesellschaft für Informatik (GI))
- 2001 - Member German Society for Cartography (Deutsche Gesellschaft für Kartographie (DGfK))

2003 - Member German Society for Surveying (Deutscher Verein für Vermessungswesen (DVW))

Honorary Memberships

2002 - Member German Geodetic Commission at Bavarian Academy of Sciences (Deutsche Geodätische Kommission (DGK))

2003 - 2007 Member of Scientific Advisory Board of Geo-Research Centre Potsdam (GFZ)

2004 - 2007 Domain Expert (Fachkollegiat) of DFG for "Geophysik und Geodäsie"

2008 - 2011 Domain Expert (Fachkollegiat) of DFG for "Geophysik und Geodäsie"

2004 - Member of Board of DGPF (Deutsche Gesellschaft für Photogrammetrie, Fernerkundung und Geoinformation)

2007 - Member of Braunschweigische Wissenschaftliche Gesellschaft

2008 - Member Geokommission DFG

2008 - Member Koordinierungsausschuss Programm Geotechnologien

2009 - Member Acatech

2011 - Member Akademie für Geowissenschaften und Geotechnologien e.V.

2012 - Member Scientific Advisory Council of Amt für militärisches Geowesen

Activities

1992 - 1996 Secretary of Working Group III/3 of the International Society for Photogrammetry and Remote Sensing (ISPRS) (Chairmen: Prof. T. Schenk, Prof. D. Fritsch); organization and conduction of a test on image understanding

1996 - 2000 Scientific Secretary of Commission IV *Mapping and Geographic Information Systems* of ISPRS (President: Prof. D. Fritsch)

1996 - 2000 Member in public relations group of German Umbrella Organization for Geoinformation (Deutscher Dachverband für Geoinformation) (DDGI)

1996 - 2000 Member in German Standardization (DIN) Working Group "Cartography and Geoinformation - Kartographie und Geoinformation"

1997 - 2004 Chair of Working group "Geographical Information Systems" of the German Society for Photogrammetry and Remote Sensing (DGPF)

1998 - Member in Commission "Generalization and Multiple Representation" of the International Cartographic Association (ICA)

2000 - 2004 Chair of Working Group 'Data Generalization and Data Mining' of Commission IV *Mapping and Geographic Information Systems* of ISPRS (with Dianne Richardson, Canada)

2001 - 2013	Head of the 'GIS-Center' at the Leibniz Universität of Hannover
2002 -	Head of the Division of the German Cartographic Society in Hannover
2002 - 2009	Chair of Working Group GIS of DGK (Deutsche Geodätische Kommission)
2003 - 2008	Member Working group I of DVW (Education and profession - Ausbildung und Beruf)
2004 - 2008	Chair of Working Group 'Multiple Representation of Image and Vector Data' of Commission II <i>Mapping and Geographic Information Systems</i> of ISPRS (with Lars Harrie, Sweden, Mark Hampe, Germany)
2008 - 2012	Chair of Working Group 'Multiple Representation of Image and Vector Data' of Commission II <i>Mapping and Geographic Information Systems</i> of ISPRS (with Lars Harrie, Sweden and Jan-Henrik Haurert, Germany)
2012 - 2016	Chair of Working Group 'WG II/8: Mobility: Tracking, Analysis and Communication' of Commission II <i>Mapping and Geographic Information Systems</i> of ISPRS (with Stephan Winter, Melbourne, Australia and Xiaoguang Zhou, Changsha, China)
since 2013:	Head of the research initiative FI:GEO at the Leibniz Universität Hannover (together with Francois Holtz)

Organization of Seminars, Workshops, Conferences

since 2002	Organization of annual AgA-Meeting (Automation in cartography, photogrammetrie and geoinformatics) (annually)
October 2003	Organization of Dagstuhl-Seminar "Computational Cartography and Spatial Modelling" (together with Peter van Oosterom, Jack Snoeyink, Mike Worboys)
February 2006	Organisation of Workshop 'Multiple Representation of Spatial Data' in Hannover (together with Mark Hampe and Lars Harrie)
March 2006	Organization of Dagstuhl-Seminar 'Spatial Data: mining, processing and visualizing (together with Jörg Sack, Peter van Oosterom, Mike Worboys)
February 2008	Organization of Workshop on 'Geosensor Networks' (together with Christian Heipke)
November 2008	Organization of Dagstuhl-Seminar 'Representation, Analysis and Visualisation of Moving Objects' (together with Robert Weibel, Jörg Sack, Wolfgang Bitterlich)
April 2009	Organization of Dagstuhl-Seminar 'Generalization of spatial information' (together with Peter van Oosterom, Sebastien Mustière, Frank van Harmelen)
June 2009	Organization of AGILE Conference in Hannover
December 2009	ISPRS workshop on quality, scale and analysis aspects of city models, Lund, Sweden, 3.-4. December 2009

February 2010	DFG-Rundgespräch: Geosensor Networks (3. - 4. Februar 2010, Leibniz Universität Hannover)
April 2010	Organization of Dagstuhl-Seminar 'Towards a Computational Transportation Science' (21. - 26. März 2010) (with Stephan Winter, Melbourne, Ouri Wolfson, Chicago, Glenn Geers, Sydney)
November 2011	DFG-Rundgespräch: Georisiken (28.11.2011, Leibniz Universität Hannover)
September 2012	Organization of German Cartographic Conference, Hannover.
December 2012	Organization of NiiShonan-Seminar 'Social Aspects of Computational Transportation Science', Japan, (with Stephan Winter, Melbourne, Ouri Wolfson, Chicago, Glenn Geers, Sydney)
November 2013	Organization of Workshop of ACM Sigspatial on Computational Transportation Science (with John Krumm, Microsoft, USA and Clément Mallet, IGN, France)
December 2013	Organization of Dagstuhl-Seminar Social Issues in Computational Transportation Science (with Stephan Winter, Melbourne, Ouri Wolfson, Chicago, Glenn Geers, Sydney)
December 2013	Organization of Dagstuhl-Seminar Geosensor Networks: Bridging Algorithms and Applications (with Matt Duckham, Melbourne, Stefan Dulman, Holland, Jörg-Rüdiger Sack, Canada)

Reviews and Evaluations

Member of Editorial Board of Journal Photogrammetrie, Fernerkundung und Geoinformation (PFG)

Member of Editorial Board of Journal Kartographische Nachrichten (KN)

Member of several evaluation committees (ETH Zürich, Evaluierungsagentur Baden-Württemberg, Aquas)

Reviewer for Journals / Publishers (among others):

International Journal of Geographical Information Science

ISPRS Journal of Photogrammetry and Remote Sensing

Cartographic Journal

Computers, Environment and Urban Systems

NJSR - Nordic Journal of Surveying and Real Estate Research

Springer Verlag

Transactions in GIS

Reviewer for Conferences (among others):

Conferences, Symposia and Workshops of ISPRS - International Society of Photogrammetry, Remote Sensing and Geoinformation

Conferences and Workshops of ICA - International Cartographic Association

GIScience

SDH - Spatial Data Handling

Conference of the AGILE (Association of GI-Labs in Europe)

ACM Sigspatial