KUNZ, Andreas

Present Position	Titular Professor / Adjunct Professor
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Degrees/Higher Education

1989	Diploma, Electrical Engineering, Technical University Darmstadt
1998	Dr. sc. techn., ETH Zurich
2004	Habilitation, ETH Zurich.

Professional Career

1989-1990	Guest researcher Technical University Darmstadt
1990-1994	Industrial experience in research and development of electronic components and networks, Texscan GmbH
1998-	Head of research group 'ICVR' (Innovation Center Virtual Reality)
1998-2004	Oberassistent ETH Zurich
2004-	Private Docent ETH Zurich
2006-	Adjunct Professor Blekinge Technical University (BTH) / Sweden
2016-	Titular Professor ETH Zurich

Other Activities

Co-organizer of VRST 2018; Co-organizer of VRST 2017; Co-organizer of Mechatronics 2010; Co-chair of IEEE Tabletops and Interactive Surfaces 2009; Co-chair of IEEE Tabletops and Interactive Surfaces 2008; Co-chair and editor of "VR/AR-Technologien für die Produktion" 2008; Organizer of International Conference in Virtual Reality 2003; Session organizer of international conference Virtual Reality for Design 2004; Member of review boards for 42 international conferences and journals; Set-up of the VR Visualization Center 'VisDome' at ETH; Responsible for blue-c I+II hardware setups; Head of "VisDome"; Reviews for multiple journals and conferences
Reviews for SNF and ETH-internal research projects
Hosting and supporting the ETH Fellowship "inspacion" (Thomas Nescher)

Additional information

Involved in basic students' education in mechanical engineering
Guest stay at Clemson University, USA (1/11-30/11, 1999)
Guest stay at Technical University Clausthal, Germany (2/12-16/12, 2001)
Guest stay at Chalmers University, Sweden (3/10-24/10, 2005)

Publications

Has published 2 books, 6 book chapters, 32 papers in refereed journals, and 188 papers in conference proceedings. Holds 6 patents in the VR field.

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Conference/Journal Activities:

3DUI; CHI; CIE; Computergraphics; CSCW; DETC; DIS; Eurographics; ISMAR; JCISE; NordiCHI; Siggraph; ITS; TEI; TMCE; VES; VR, VRST, ICCHP, VRST

Research (keywords)

Virtual Reality for the interaction with digital data ('Digital Product', 'Digital Factory')): Product visualization systems, Development of haptic interfaces; Redirected Walking

Virtual Reality for supporting collaboration: Support systems for early stages of product development, Tele-collaboration systems, Tangible User Interfaces (TUI)

Teaching

Virtual Reality I (Bachelor), Virtual Reality II (Master) at ETH
Human Computer Interaction at UZH
Virtual Reality in Sustainable Product Development at BTH
PhD student block courses as Chalmers Technical University Gothenburg
Informationsvisualisierung UOAS St. Gallen
Bachelor- and Master projects
Supervision of the 'Innovationsprojekt'

Supervised students (Semester-, Diploma-, Bachelor- and Master thesis) since 1994: 190
Referee or co-referee on doctoral dissertations since 2003: 34

Achievements (since 1998)

1. Improving psychological treatments my means of VR: dementia, phobia, sleep walking, etc. → Best presentation award at VRST 2018
2. Applying VR in medical training scenarios at the University of Zurich in the field of hand hygiene → Quality prize 2018 of the University Hospital Zurich
3. Using VR for helping with special needs
4. Applying VR in the context of "Industry 4.0": Optimizing MTM methods by the integration of real walking in an early stage.
5. Redirected Walking in Large-scale Virtual Environments
6. Applying VR technologies for accessibility to tabletops
7. Applying VR technologies to the Factory of the Future
8. Development of highly immersive systems integrating real humans into virtual environments.
9. Development of a new force feedback device based on EAP.
10. Development of tangible user interfaces (TUI) for brainstorming scenarios
11. Development of an environment for creative & innovative communication
12. Development of an optical multiple-device tracking system
13. Organization of the new research Field "Virtual Reality"

Collaboration (excerpt)

Research institutes: Chalmers University, Sweden; Blekinge University, Sweden; Clemson University, USA; Technical University Cluj/Napoca, Romania; University Zurich; UOAS St. Gallen and Rapperswil; University of Nottingham, UK; Technical University Darmstadt, Germany; JKU Linz; Bergen University/Norway
Industry: Bosch, ABB, Siemens, BMW, DaimlerChrysler, Volvo, Rieter, Airbus, ThyssenKrupp, Pilatus, Mikron, SMART Technologies, Rolls Royce, Autoeuropa, Reishauer