

IPT - EGVE 2007

13th Eurographics Symposium on Virtual Environments
10th Immersive Projection Technology Workshop

Conference Program

Monday, 16.07.2007

13:00-13:10 WELCOME

13:10-14:50 I - DISPLAYS

Chair: Henry Fuchs, UNC

Gerwin de Haan, Eric J. Griffith, Michal Koutek, Frits H. Post
Delft University of Technology, The Netherlands
PDRIVE: The Projector-based, Desktop, Reach-In Virtual Environment

Juergen Wind, Kai Riege, Manfred Bogen
Fraunhofer IAIS, Sankt Augustin, Germany
Spinnstube: A Seated Augmented Reality Display System

Kaori Murase, Tetsuro Ogi, Kouta Saito, Takahide Koyama
University of Tsubaka / SPIN Inc., Japan
Immersive Augmented Reality Display System Using a Large Semi-transparent Mirror (short paper)

Wolfram Schoor, Steffen Masik, Marc Hofmann, Rüdiger Mecke, Gerhard Müller
Fraunhofer IFF, Magdeburg, Germany
eLBE-DoM: 360 Degree Full Immersive Laser Projection System (short paper)

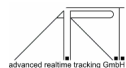
Armin Hopp, Sven Havemann, Dieter W. Fellner
digital IMAGE, Overath, Germany / CGV, TU Graz, Austria / TU Darmstadt, Fraunhofer IGD, Darmstadt, Germany
A Single Chip DLP Projector for stereoscopic images of high color quality and resolution (short paper)

Bjoern Schwerdtfeger, Gudrun Klinker
Fachgebiet Augmented Reality, TU München, Germany
Hybrid Information Presentation: Combining a Head Mounted Augmented Reality Laser Projector and a Conventional Computer Display (short paper)

Bauhaus-Universität Weimar



INTERSENSE



Monday, 16.07.2007

15:15-16:15 POSTER SESSION & EXHIBITOR TALKS

Chair: Roland Blach, Fraunhofer IAO

Mario Covarrubias, Monica Bordegoni
Politecnico di Malino, Italy
Direct Visuo-Haptic Display System Using a Novel Concept

Dean Wormell, Patricia Katzman, Eric Foxlin
InterSense, Inc., Bedford, MA, USA
Improved 3D Interactive Devices for Passive and Active Stereo Virtual Environments

Ludovic Sternberger, Sylvain Brandel, Dominique Bechmann
LSIIT CNRS - Université Strasbourg, France
vrLib: A Designer Oriented Interaction and 3D User Interface Library

Manuel Veit, Antonio Capobianco, Dominique Bechmann
LSIIT CNRS - Université Strasbourg, France
Using proprioception as a cue towards effective spatial input in VR : a framework for an experimental study

Thies Pfeiffer, Marc Erich Latoschik
AG WBS, Technische Fakultät, Universität Bielefeld, Germany
Interactive Social Displays

Elham Andaroodi, Mohammad-Reza Matini, Nobuaki Abe
National Institute of Informatics, Japan / University of Stuttgart, Germany / Waseda University, Japan
3-D Reconstitution and Virtual Reality of the World heritage in Danger, Citadel of Bam

Heni Ben Amor, Matthias Weber, Guido Heumer, Bernhard Jung
TU Freiberg, Germany
Coordinate System Transformations for Imitation of Goal-Directed Trajectories in Virtual Humans

Katharina Pentenrieder, Fabian Doil, Stefan Nölle, Peter Meier
metaio GmbH, München / Volkswagen AG, Wolfsburg, Germany
Requirements for Industrial Augmented Reality Tracking Systems - an Evaluation

Arturo Garcia, José P. Molina, Anthony Steed, Diego Martínez, Pascual González
University of Castilla-La Mancha, Spain / University College London, United Kingdom
An approach to the evaluation of ownership management techniques in Collaborative Virtual Environments

Frank Haselberger, Matthias Bues, Tibor Schütz
University of Stuttgart / Fraunhofer IAO, Stuttgart, Germany
An immersive CAD testbed

EXHIBITOR TALKS

Sandrine Dos Santos and Sébastien Kuntz
Virtools, A Dassault Systèmes Company
Virtools VR Solutions: technical overview and use in Education & Industry



INTERSENSE

Monday, 16.07.2007

16:40-18:10 II - TRACKING & MEASURING

Chair: Gabriel Zachmann, Uni Clausthal

Otto Korkalo, Tapio Takala
Helsinki University of Technology, Finland
Monocular head tracking for desktop virtual environments (short paper)

Jan Fischer, Daniel Flohr
University of Victoria, Canada / University of Tuebingen, Germany
A Lightweight ID-Based Extension for Marker Tracking Systems (short paper)

Dean Wormell, Patricia Katzman, Eric Foxlin
InterSense Inc., Bedford, MA, USA
Advanced Inertial-Optical Tracking System for Wide Area Mixed and Augmented Reality Systems (short paper)

Marc Wolter, Claudia Armbrüster, Jakob T. Valvoda
VR Group, RWTH Aachen University, Germany
High Ecological Validity and Accurate Stimulus Control in VR-based Psychological Experiments

Michal Koutek, Rene Molenaar, Gerwin de Haan, Frits Post
Delft University of Technology, The Netherlands
Visual Consistency in Rotational Manipulation Tasks in Sheared-Perceived Virtual Environments

20:00-00:00 LAB DEMOS & POSTER PRESENTATION



IPT - EGVE 2007
Conference Rooms & Exhibition
Universitätsbibliothek / Audimax
Steubenstrasse 6
99423 Weimar

Beethovenplatz
Dorint Hotel
- Coach to Belvedere
Tuesday, 19:30
- Underground Valet Parking

Lab Demonstrations & Poster Exhibition
Fakultät Medien
Bauhausstrasse 11
99423 Weimar

Tuesday, 17.07.2007

9:00-10:00 KEYNOTE TALK

Prof. Dr. Gert Pfurtscheller
Laboratory of Brain-Computer Interfaces, Graz University of Technology, Austria
Wheelchair control from thought: Simulation in an immersive virtual environment

10:30-12:15 III - Studies

Chair: Robert van Liere, CWI

Junji Sone
Tokyo Polytechnic University, Japan
Experimental Study of Haptic Interface Considering Myoelectricity (short paper)

Victoria Interrante, Eleanor Rourke, Leanne Gray, Lee Anderson, Brian Ries
University of Minnesota / Colby College / Kansas State University, USA
A Quantitative Assessment of the Impact on Spatial Understanding of Exploring a Complex Immersive Virtual Environment using Augmented Real Walking versus Flying (short paper)

Pieter Jorissen, Lode Vanacken
Expertise Centre for Digital Media, Belgium
Evaluating the Effects of Haptics on Presence while Traveling in Virtual Environments (short paper)

Betty Mohler, Jennifer L. Campos, Michael B. Weyel, Heinrich H. Buelthoff
Max Planck Institute for Biological Cybernetics, Tübingen, Germany
Gait parameters while walking in a head-mounted display virtual environment and the real world (short paper)

André Kunert, Alexander Kulik, Anke Huckhauf, Bernd Froehlich
Bauhaus-Universität Weimar, Germany
A Comparison of Tracking- and Controller-Based Input for Complex Bimanual Interaction in Virtual Environments

Jean-Bernard Martens, Robert van Liere, Arjan Kok
TU Eindhoven, The Netherlands
Widget Manipulation Revisited: a Case Study in Modeling Interactions Between Experimental Conditions

14:15-15:45 PANEL

Chair: Betty Mohler
Max Planck Institute for Biological Cybernetics, Tübingen, Germany
Human Perception and Virtual Environments

Tuesday, 17.07.2007

16:15-17:30 IV - INTERACTION

Chair: Dominique Bechmann, LSIIT CNRS - ULP Strasbourg

Manuela Waldner, Michael Kalkusch, Dieter Schmalstieg
TU Graz, Austria
Optical Magic Lenses and Polarization-Based Interaction Techniques

Maryia Kazakevich, Pierre Boulanger, Walter F. Bischof
University of Alberta, Canada
Augmentation of Visualisation Using Sonification: A Case Study in Computational Fluid Dynamics (short paper)

Marc Schirski, Christian Bischof, Torsten Kuhlen
RWTH Aachen University, Germany
Interactive Exploration of Large Data in Hybrid Visualization Environments

Nicolas Mollet, Stéphanie Gerbaud, Bruno Arnaldi
IRISA / INRIA / INSA, France
STORM: a generic interaction and behavioral model for 3D objects and humanoids in a virtual environment (short paper)

20:00-00:00 SOCIAL EVENT



Schloss Belvedere



Schloss Belvedere, Orangerie

Free transfer to Belvedere
Please meet at Beethoovenplatz
in front of the Dorint hotel. (See map)
Buses leave at 19:00.

Wednesday, 18.07.2007

9:00-10:45 V - IMAGE GENERATION

Chair: Anatole Lecuyer, INRIA

Tyler Johnson, Henry Fuchs
University of North Carolina - Chapel Hill, USA
A Unified Multi-Surface, Multi-Resolution Workspace with Camera-Based Scanning and Projector-Based Illumination (short paper)

Mario Lorenz, Guido Brunnett, Marcel Heinz
Chemnitz University of Technology, Germany
Rendering on Tiled Displays using Advanced Stream Caching (short paper)

Guodong Yuan
Tsinghua University, Beijing, China
A GPU-Based Framework of Photometric Uniformity for Multi-Projector Tiled Display

Kenji Honda, Naoki Hashimoto
Tokyo Institute of Technology, Japan
Real-time Reconstruction of Pseudo Wide-angle Images with an Approximating Depth Model (short paper)

Ingmar Steffen Franke, Martin Zavesky, Raimund Dachselt
Technische Universität Dresden, Germany
Learning from Painting: Perspective-dependent geometry deformation for perceptual realism (short paper)

Ferdinand Smit, Robert van Liere, Bernd Froehlich
Center for Mathematics and Computer Science, Amsterdam, The Netherlands / Bauhaus-Universität Weimar, Germany
Three Extensions to Subtractive Crosstalk Reduction

11:15-12:15 INVITED SESSION: INTUITION

Chair: Roland Blach
Fraunhofer IAO, Stuttgart, Germany
The Impact of Biological and Neural Sensor Technology on 3D Interaction

13:30-15:00 VI - VR/AR SYSTEMS & TECHNIQUES

Chair: Marc Latoschik, Uni Bielefeld

Guillaume Bouyer, Patrick Bourdot, Mehdi Ammi
LIMSI-CNRS, France
Supervision of Task-Oriented Multimodal Rendering for VR Applications

Kristopher J. Blom, Steffi Beckhaus
University of Hamburg, Germany
Functional Reactive Virtual Reality (short paper)

Samir Torki, Patrice Torguet, Cédric Sanza
IRIT, France
Adaptive Classifier System-Based Dead Reckoning

Jan Fischer, Benjamin Huhle, Andreas Schilling
University of Victoria, Canada; University of Tuebingen, Germany
Using Time-of-Flight Range Data for Occlusion Handling in Augmented Reality