



AVI 2012



Università degli  
Studi di Salerno



**AVI2012**  
*Preliminary Program*  
**Capri Palace, Capri Island (Naples), Italy**

**Monday, May 21**

**10.00 -12.00 Conference registration**

**14.30-15.15 Invited Talk**  
*Room 'Mediterranea'*

*Usable Advanced Visual Interfaces in Aviation*  
Mark T. Maybury, USA Air Force, Pentagon

**15.15-15.45 Coffee break**

**15.45-17.30 System papers announcements**

**17.30-18.30 Steering Committee meeting**

**Tuesday, May 22**

**8.00 -9.00 Conference registration**

**8:45 – 9:00 Opening Ceremony**

Prof. Raimondo Pasquino, Rector of the University of Salerno  
Prof. Stefano Levialdi and Prof. Genny Tortora, Conference and Program Co-chairs

**9.00-9.45 Invited Talk**  
*Room 'Mediterranea'*

*Advanced Interface Productization: Lessons Learned*

David Kurlander  
Industry Consultant, Seattle, USA

## **9.45-10.15 Poster announcements**

## **10.15-10.45 Coffee break and Poster exhibition**

### **10.45-12.55 Session 1.1 - *Interface Design I***

**Chair Mark T. Maybury**

*Room 'Mediterranea'*

*Push and Pull of Web User Interfaces in Multi-Device Environments*

Giuseppe Ghiani, Fabio Paternò, Carmen Santoro

ISTI-CNR , Italy

*UISKEI: A Sketch-based Prototyping Tool for Defining and Evaluating User Interface Behavior*

Vinicius C. V. B. Segura , Simone Diniz Junqueira Barbosa, Fabiana Pedreira Simões

PUC-Rio, Brazil

*Asynchronous Active Values for Client-Side Interactive Service Coordination*

Alan Dix

Talis, Birmingham University, United Kingdom

*Foundations for the Design of Visualizations that Support Trust in Distributed Teams*

Erik Trainer, David Redmiles

University of California, Irvine USA

*CADo: A supporting system for flower arrangement*

°Anna Yokokubo, \*Kirsti Sääsilahti, \*Riitta Kangaskorte, °°Mika Luimula, °Itiro Siio

°Ochanomizu University, Japan

\*Oulu Southern Institute / University of Oulu, Finland

°°CENTRIA Research and Development, RFMedia Laboratory, Finland

*Designing Visual Interactive Systems in the e-Government Domain*

Daniela Fogli

Università degli studi di Brescia, Italy

### **10.45-13.00 Session 1.2 - *Visualization I***

**Chair Tiziana Catarci**

*Room 'Cavalli'*

*FatFonts: Combining the Symbolic and Visual Aspects of Numbers*

Miguel Nacenta°, Uta Hinrichs\*, Sheelagh Carpendale\*

°University of St Andrews, United Kingdom

\*University of Calgary, Canada

*Interactive Exploration of Music Listening Histories*

Ricardo Dias, Manuel J. Fonseca, Daniel Gonçalves

NESC-ID/IST/TU Lisbon, Portugal

*The Product Explorer: Decision Making with Ease*

Patrick Riehm, Jens Opolka, Bernd Froehlich

Bauhaus Uni Weimar, Germany

*TimeSlice: Interactive Faceted Browsing of Timeline Data*

°Jian Zhao, \*Steven Drucker, \*Danyel Fisher, \*Donald Brinkman

°University of Toronto, Canada

\*Microsoft Research Redmond, USA

*Vertigo zoom: combining relational and temporal perspectives on dynamic networks*

°Paolo Federico, °Wolfgang Aigner, °Silvia Miksch, \*Florian Windhager, \*Michael Smuc

°Vienna University of Technology, Austria

\*Danube University Krems, Austria

*Balloon Selection revisited - Multi-touch Selection Techniques for Stereoscopic Data*

°Florian Daiber, \*Eric Falk, °Antonio Krüger

°DFKI GmbH, Germany

\*Saarland University, Germany

*Visualiz'em: "Show me more about him!"*

João Guerreiro, Daniel Gonçalves

INESC-ID, Portugal

## **13.00-14.30 Lunch**

### **14.30-15.45 Session 2.1 - Multimodal Interfaces I**

**Chair David Kurlander**

Room 'Mediterranea'

*CinemaGazer: a System for Watching Videos at Very High Speed*

Kazutaka Kurihara

National Institute of Advanced Industrial Science and Technology, Japan

*Wiimote and Kinect: Gestural User Interfaces add a Natural third dimension to HCI*

Rita Francese, Ignazio Passero, Genny Tortora

University of Salerno, Italy

*Looking behind Bezels: French Windows for Wall Displays*

°Rodrigo de Almeida, °Clément Pillias, \*Emmanuel Pietriga, °°Pierre Cubaud

°INRIA, France

\*INRIA & CIRIC, France

°°CNAM, France

### **14.30-15.45 Session 2.2 - User and cognitive Models**

Room 'Cavalli'

*Does (Multi-)Touch Aid Users' Spatial Memory and Navigation in 'Panning' and in 'Zooming & Panning' UIs?*

°Hans-Christian Jetter, °Svenja Leifert, \*Jens Gerken, °Sören Schubert, °Harald Reiterer  
°University of Konstanz, Germany  
\*ICT AG, Germany

*How Spatial Layout, Interactivity, and Persistent Visibility Affect Learning with Large Displays*  
Eric Ragan, Alex Endert, Doug Bowman, Francis Quek  
Virginia Tech, USA

*The Cost of Display Switching: A Comparison of Mobile, Large Display and Hybrid UI Configurations*  
Umar Rashid, Miguel Nacenta, Aaron Quigley  
University of St. Andrews, United Kingdom

## **15.45-16.15 Coffee break & System paper demos**

*DepthTouch: An Elastic Surface for Tangible Computing*

Joshua Peschke, Fabian Göbel, Thomas Gründer, Mandy Keck, Dietrich Kammer, Rainer Groh  
Technische Universität Dresden Institute for Software- and Multimedia-Technology, Dresden,  
Germany

*MEAL - A Menu Evaluation System with Symbolic Icons in Mobile Devices*

\*Ai Gomi, \*Takayuki Itoh, °Kang Zhang  
\*Ochanomizu University, Tokyo, Japan  
° University of Texas at Dallas, Richardson, TX, USA

*Supporting Interaction and Collaboration on Large Displays using Tablet Devices*

Kelvin Cheng, Jane Li, Christian Müller-Tomfelde  
CSIRO ICT Centre, Marsfield, Australia

*RMob - a mobile app for real time information in urban transportation*

Laura Magrini, Matteo Nati, Emanuele Panizzi  
"Sapienza" Università di Roma, Italy

*Navigation in Past Museum Exhibitions using Multimedia Archives*

Rui Nóbrega, Nuno Correia, Carlos Nobre, Ana Bárbara Teixeira, Leonor Oliveira, Raquel Henriques  
da Silva  
Universidade Nova de Lisboa, Caparica, Portugal

*Experimenting DELE: a Deafcentered ELearning Visual Environment*

Paolo Bottoni, Daniele Capuano, Maria De Marsico, Anna Labella, Stefano Leviaidi  
"Sapienza" University of Rome, Italy

## **16.15-18.15 Session 3.1 - Context Aware Pervasive Interfaces I**

**Chair Fabio Paternò**

Room 'Mediterranea'

*Towards Building Pervasive UIs for the Intelligent Classroom: The PUPIL Approach*

°Maria Korozi, °Stavroula Ntoa, °Margherita Antona, °Asterios Leonidis, \*Constantine Stephanidis  
°Foundation for Research and Technology – Hellas (FORTH), Greece  
\*Foundation for Research and Technology – Hellas (FORTH), University of Crete, Department of  
Computer Science

*Context-Aware Systems: The ‘Right’ Information, at the ‘Right’ Time, in the ‘Right’ Place, in the  
‘Right’ Way, to the ‘Right’ Person*

Gerhard Fischer  
University of Colorado, Boulder, USA

*Software-Based Adjustment of Mobile Autostereoscopic Graphics using Static Parallax Barriers*

Martin Paprocki, Morten Bak Kristoffersen, Kim Krog, Martin Kraus  
Aalborg University, Denmark

*SmartWig: Wig-based Wearable Computing Device for Communication and Entertainment*

°Hiroaki Tobita, \*Takuya Kuzi  
°Sony CLS Paris, France  
\*University of Electro-Communications, Tokyo, Japan

*Comparative Social Visualization for Personalized E-learning*

°I-Han Hsiao, \*Julio Guerra, \*Denis Parra, °°Fedor Bakalov, °°Birgitta König-Ries, °Peter Brusilovsky  
°University of Pittsburgh, USA  
\*School of Information Sciences, University of Pittsburgh, USA  
°°Friedrich Schiller University of Jena, Germany

*Nondirective Information Presentation for On-site Safety Training in Chemistry Experiments*

Kaori Fujinami, Akifumi Sokan  
Tokyo University of Agriculture and Technology, Japan

## **16.15-18.25 Session 3.2 - User-system Interaction**

### ***Chair Alessio Malizia***

*Room ‘Cavalli’*

*Animated Transitions between User Interface Views*

Charles-Erich Dessart, Vivian Genaro Motti, Jean Vanderdonckt  
Université catholique de Louvain, Louvain Interaction Lab, Belgium

*Search Intent Estimation from User’s Eye Movements for Supporting Information Seeking*

\*Kazutoshi Umemoto, \*°Takehiro Yamamoto, \*°Satoshi Nakamura, \*Katsumi Tanaka  
\*Kyoto University, Yoshida-Honmachi, Sakyo, Kyoto, Japan  
°JST CREST

*Continuous Edgewise: Dictionary-Based Disambiguation Instead of Explicit Segmentation by the  
User*

°Benoît Martin, \*Poika Isokoski, °Grégory Karmann, °Thomas Rollinger  
°Université Paul Verlaine – Metz, France  
\*University of Tampere, Finland

*AutoComPaste: Auto-Completing Text as an Alternative to Copy-Paste*

°Shengdong Zhao, \*Fanny Chevalier, °Wei Tsang Ooi, °Chee Yuan Lee, °Arpit Agarwal

°National University of Singapore, Singapore

\*OCAD University, Canada

*Using the Power of Associations: BrainDump - A Revised Nature Inspired Visual Interface for Sensemaking*

Marius Brade, Christian Braendel, Rainer Groh

TU Dresden, Chair of Media Design, Germany

*A Visual Interface for Querying Ontologically and Socially Annotated 3D Worlds for the Web*

Fabio Pittarello, Ivan Gatto

Università Ca' Foscari Venezia – DAIS, Italy

## **19.30 Welcome party**

### **Posters scheduled on Tuesday, May 22nd**

*Comparing Cognitive Effort in Spatial Learning of Text Entry Keyboards and ShapeWriters*

Arindam Das and Wolfgang Stuerzlinger

York University, Canada

*Aesthetic Visualisation of Information: Optimization of Graph Representations*

°Dieter Meiller, \*Matthias Hemmje, \*Claus-Peter Klas

°Hochschule Amberg-Weiden, Germany

\*University of Hagen, Germany

*Automatic Natural Expression Recognition using Head Movement and Skin Color Features*

Hamed Monkaresi, Rafael A. Calvo, M. S. Hussain

University of Sydney, Australia

*Bridging the gap: advances in interaction design for enterprise applications in production scenarios*

Christian Lambeck, Dietrich Kammer, Pascal Weyprecht, Rainer Groh

Dresden University of Technology, Institute for Software- and Multimedia-Technology, Dresden, Germany

*Study of Information Clouding Methods to Prevent Spoilers of Sports Match*

°Satoshi Nakamura and \*Takanori Komatsu

°Kyoto University, Japan

\*Shinshu University, Japan

*Interaction atmosphere: blending design style*

Antonella Varesano

Udine University, Italy

*Supporting user of information retrieval systems by visualizing the information dialog context*

Paul Landwich, Claus-Peter Klas and Matthias Hemmje  
FernUniversität in Hagen, Germany

*JewelryStudio: System for capturing/browsing pictures of jewelry from multiple viewpoints*

°Chiho Watanabe, °\*Koji Tsukada and °Itiro Siio

°Ochanomizu University, Japan

\*JST PRESTO, Japan

*Automatic Properties Adjusting Method using User Operations for Local Search Smartphone Applications*

Kaori Kobayashi, Daisuke Kitayama and Kazutoshi Sumiya

University of Hyogo, Japan

*ArchMatrix: a Visual Interactive System for Graph-Based Knowledge Exploration in Archaeology*

Barbara Rita Barricelli, Stefano Valtolina and Matilde Marzullo

Università degli Studi di Milano, Italy

*Interactive Curating of User Tags for Audiovisual Archives*

°Yi-ling Lin and \*Lora Aroyo

°University of Pittsburgh, USA

\*Free University of Amsterdam, Netherlands

## **Wednesday, May 23**

### **8.30-9.15 Invited Talk**

**Room 'Mediterranea'**

*Gesture-based Interaction: A New Dimension for Mobile User Interfaces*

Yang Li

Google Research, California, USA

### **9.15-9.45 Poster Announcements**

### **9.45 -10.15 Coffee break and Poster Exhibition**

### **10.15-12.25 Session 4.1 - Multimodal Interfaces II**

**Chair Kai Olsen**

**Room 'Mediterranea'**

*Comparison of Video-Based Pointing and Selection Techniques for Hands-Free Text Entry*

Yulia Gizatdinova, Oleg Spakov, Veikko Surakka

University of Tampere, Finland

*SNOUT: One-Handed use of Capacitive Touch Devices*

Adam Zarek, Daniel Wigdor, Karan Singh

University of Toronto, Canada

*A Gestural Approach to Presentation Exploiting Motion Capture Metaphors*  
Stefania Cuccurullo, Rita Francese, Sharefa Murad, Ignazio Passero, Maurizio Tucci  
University of Salerno, Italy

*SpeeG: A Multimodal Speech- and Gesture-based Text Input Solution*  
Lode Hoste, Bruno Dumas, Beat Signer  
Vrije Universiteit Brussel, Belgium

*Image correction technique for 3D interactive surface using transparent elastic gels*  
°Taro Tokui, \*Masami Yamasaki, °Hideki Koike  
°University of Electro-Communications, Japan  
\*Hitachi Ltd, Japan

*Squama: Modular Visibility Control of Walls and Windows for Programmable Physical Architectures*  
Jun Rekimoto  
Interfaculty Initiatives in Information Studies, The University of Tokyo, Japan

## **10.15-12.25 Session 4.2 - Evaluation I**

### ***Chair Athula Ginige***

*Room 'Cavalli'*

*Evaluation of a Multimodal Video Annotator for Contemporary Dance*  
Diogo Cabral, João Valente, Urândia Aragão, Carla Fernandes, Nuno Correia  
Universidade Nova de Lisboa, Portugal

*A Field Study of a Multi-Touch Display at a Conference*  
°Carmelo Ardito, °Maria Francesca Costabile, °Rosa Lanzilotti, °Antonella De Angeli, °Giuseppe Desolda  
°University of Bari, Italy  
°°University of Trento, Italy

*Two User Studies on Creation and Evaluation of Use Scenarios for Mixed Reality Communication*  
°Katja Suhonen, °Kaisa Väänänen-Vainio-Mattila, \*Martin Schrader, \*Monika Pölönen, \*Marja Salmimaa, \*Pasi Saarikko  
°Tampere University of Technology, Finland  
\*Nokia Research Center Tampere, Finland

*A Model-based Approach to Ongoing Product Evaluation*  
°Shah Rukh Humayoun, \*Yael Dubinsky, °Tiziana Catarci, °°Eli Nazarov, °°Assaf Israel  
°SAPIENZA – Università di Roma, Italy  
\*IBM – Haifa Research Lab, Israel  
°°Technion – Israel Institute of Technology , Israel

*Usability Issues for an Aerospace Digital Library*  
°Ferruccio Diozzi, \*Pasquale Di Giovanni, °Gianluca Pezzullo, °Rosa Sannino, °Angela Vozella  
°CIRA, Italy  
\*University of Salerno, Italy



*A Guide to Reporting Scientific Evaluation in Visualization*  
Camilla Forsell, Matthew Cooper  
Linköping University, Sweden

## **12.30-14.00 Lunch**

### **14.00-15.45 Session 5.1 - Interface Design II**

**Chair Paloma Diaz**

*Room 'Mediterranea'*

*Interface Affordances and Social Practices in Online Communication Systems*

°Suely Fragoso, \*Rebeca Recuero Rebs, °°Daiani Ludmila Barth

°Universidade Federal do Rio Grande do Sul, UFRGS, Brazil

\*Universidade do Vale do Rio do Sinos, Unisinos, Brazil

°°Fundacao Universidade Federal de Rondonia, UNIR, Brazil

*Designing Large High-Resolution Display Workspaces*

Alex Endert, Lauren Bradel, Jessica Zeitz, Christopher Andrews, Chris North  
Virginia Tech, USA

*Towards the Establishment of a Framework for Intuitive Multi-touch Interaction Design*

Amy Ingram, Xiaoyu Wang, William Ribarsky

University of North Carolina at Charlotte, USA

*Termite: Visualization Techniques for Assessing Textual Topic Models*

Jason Chuang, Christopher D. Manning, Jeffrey Heer

Stanford University, USA

*Metaphor modelling for tangible interfaces evaluation*

°Augusto Celentano, \*Emmanuel Dubois

°Universita' Ca' Foscari Venezia, Italy

\*IRIT, Université Paul Sabatier, France

### **14.00-15.45 Session 5.2 - Context Aware Pervasive Interfaces II**

**Chair Alan Dix**

*Room 'Cavalli'*

*Embodied cooperation using mobile devices: presenting and evaluating the Sync4All application*

Giovanna Varni, Maurizio Mancini, Gualtiero Volpe

InfoMus-DIST-University of Genoa, Italy

*WithYou - A Communication System to Provide Out Together Feeling*

Ching-Tzun Chang, Shin Takahashi, Jiro Tanaka

University of Tsukuba, Japan

*Creation and Visualization of Context Aware Augmented Reality Interfaces*

Allan Oliveira, Regina B. Araujo

Federal University of São Carlos , Brazil

*I feel Lucky: an automated personal assistant for smartphones*

\*Teresa Onorati, \*Alessio Malizia, °Kai Olsen, \*Paloma Diaz, \*Ignacio Aedo

°Molde University College, Norway

\*Universidad Carlos III de Madrid, Spain

*Magnetic Augmented Reality: Virtual Objects in Your Space*

Rui Nóbrega, Nuno Correia

Universidade Nova de Lisboa, Portugal

*Distributed Interaction: A Multi-Device, Multi-User Music Experience*

Henrik Sørensen, Jesper Kjeldskov

Aalborg University, Denmark

## **15.45-16.15 Coffee break & System paper demos**

*iPhone interface for wireless control of a robot*

Emanuele Panizzi, Dario Vitulli

"Sapienza" Università di Roma, Italy

*Prototyping a Gestural Interface for Selecting and Buying Goods in a Public Environment*

Ivano Gatto, Fabio Pittarello

Università Ca' Foscari Venezia, Italy

*SocialStory: A Social Storyboard System for Sharing Experiences in Emergencies*

Luca Lupo, Alessio Malizia, Paloma Diaz, Ignacio Aedo

Universidad Carlos III de Madrid, Spain

*A WebGL talking head for mobile devices*

Alberto Benin, Piero Cosi, G. Riccardo Leone

ISTC-CNR Padova, Italy

*BrainDump – Taking Fluid Interaction Literally*

Marius Brade, Christian Brändel, Rainer Groh

Technische Universität Dresden, Germany

*SHIRI: Buttocks Humanoid that Represents Emotions with Visual and Tactual Transformation of the Muscles*

Nobuhiro Takahashi, Yasushi Matoba, Toshiki Sato, Hideki Koike

The University of Electro-Communications, Chofu, Japan

## **16.15-18.05 Session 6.1 - Evaluation II**

**Chair Maria Francesca Costabile**

Room 'Mediterranea'

*Supporting Active Reading on Pen and Touch-Operated Tabletops*

Fabrice Matulic, Moira C. Norrie

ETH Zurich, Switzerland

*An empirical study on the impact of edge bundling on user comprehension of graphs*  
Fintan McGee, John Dingliana  
Trinity College Dublin, Ireland

*An Approach to Tuning Distributed Virtual Environment Performance by Modifying Terrain*  
°H. Lally Singh, °Denis Gracanin, \*Kresimir Matkovic  
°Virginia Tech, USA  
\*VRVis Research Centre, Austria

*Visualizing Set-Valued Attributes in Parallel with Equal-Height Histograms*  
°Kent Wittenburg, \*Alessio Malizia, \*Luca Lupo, °°Georgiy Pekheryev  
°Mitsubishi Electric Research Laboratories & Universidad Carlos III de Madrid  
\*Universidad Carlos III de Madrid, Spain  
°°Mitsubishi Electric Research Laboratories

*Motivations for Accessing Social Networking Services on Mobile Devices*  
°Yanqing Cui, \*Li Wang  
°Nokia Research Center, Finland  
\*University of Tampere, Finland

*Generating Applications directly on the Mobile Device: an Empirical Evaluation*  
Andrea De Lucia, Rita Francese, Michele Risi, Genny Tortora  
University of Salerno, Italy

## **16.15-18.25 Session 6.2 - Visualization II**

***Chair Giuseppe Santucci***

*Room 'Cavalli'*

*Interactive Visualization of Emerging Topics in Multiple Social Media Streams*  
Adrian M.P. Brasoveanu, Alexander Hubmann-Haidvogel, Arno Scharl  
MODUL University Vienna, Austria

*Proportions in Categorical and Geographic Data: Visualizing the Results of Political Elections*  
Florian Stoffel, Halldor Janetzko, Florian Mansmann  
University of Konstanz, Germany

*AppInsight: What have I been doing?*  
Gabriel Barata, Hugo Nicolau, Daniel Gonçalves  
INESC-ID, Portugal

*User-Centered Design of a Visual Data Mapping Tool*  
Abdallah Namoun, Usman Wajid, Nikolay Mehandjiev, Ali Owraq  
University of Manchester, United Kingdom

*Who Have I Been Talking To?*  
°Tiago Garcia, °João Aires, \*Daniel Gonçalves  
°IST, Portugal

\*INESC-ID, Portugal

*Perspective+Detail - a visualization technique for vertically curved displays*

°Tobias Schwarz, \*Fabian Hennecke, \*Felix Lauber, °°Harald Reiterer

°Siemens AG, Germany

\*University of Munich, Germany

°°University of Konstanz

## 19.30 Gala dinner

### Posters scheduled on Wednesday, May 23th

*SPALENDAR: Visualizing a Group's Calendar Events over a Geographic Space on a Public Display*

Xiang 'Anthony' Chen, Sebastian Boring, Sheelagh Carpendale, Anthony Tang, Saul Greenberg

University of Calgary, Canada

*An Interface for Visual Inspection based on Image Segmentation*

James Mardell, Mark Witkowski and Robert Spence

Imperial College London, UK

*Envisioning Grid Vulnerabilities: Multi-dimensional Visualization for Electrical Grid Planning*

°Rosa Romero, \*Kent Wittenburg, °David Díez and °Paloma Díaz

°Universidad Carlos III de Madrid, Spain

\* Mitsubishi Electric Research Laboratories, UK

*Studies of Vection Field II: a method for generating smooth motion pattern*

°Hiromi Yoshikawa, °Taku Hachisu, °Shogo Fukushima, \*Masahiro Furukawa, °Hiroyuki Kajimoto

and °Takuya Nojima

°The University of Electro-Communications, Japan

\*Keio University, Japan

*Stacked Trees: a New Hybrid Visualization Method*

°Gilles Bisson and \*Renaud Blanch

°LIG-CNRS, France

\*LIG-UJF, France

*Semantic Road Networks for Recommender Systems*

Thomas Neiryck

KU Leuven, Belgium

*User Profiling vs. Accuracy in Recommender System User Experience*

°Paolo Cremonesi, \*Francesco Epifania and °Franca Garzotto

°DEI-Politecnico di Milano, Italy

\*DSI-Università degli Studi di Milano, Italy

*"Don't touch the oven": Motion-based Touchless Interaction with Household Appliances*

Franca Garzotto and Matteo Valoriani

DEI-Politecnico di Milano, Italy

*Seamless Mixed Reality Tracking in Tabletop Reservoir Engineering Interaction*  
Paul Lapides, Nicole Sultanum, Ehud Sharlin and Mario Costa Sousa  
University of Calgary, Canada

*Representing and Visualizing Folksonomies as Graphs - A Reference Model*  
°Steffen Lohmann and \*Paloma Díaz  
° University of Stuttgart, Germany  
\*Universidad Carlos III de Madrid, Spain

## **Thursday, May 24**

### **8.30-9.15 Invited Talk** *Room 'Mediterranea'*

*Make It So: Learning from Science Fiction Interfaces*  
Nathan Shedroff  
California College of the Arts, California USA

### **9.15-10.00 Poster Announcements**

### **10.00 -10.30 Coffee break and Poster Exhibition**

### **10.30-12.40 Session 7.1 - Graph Visualization** *Chair Maurizio Martelli* *Room 'Mediterranea'*

*GraphPrism: Compact Visualization of Network Structure*  
Sanjay Kairam, Diana MacLean, Manolis Savva, Jeffrey Heer  
Stanford University, USA

*Exploring the Design Space of Interactive Link Curvature in Network Diagrams*  
°Nathalie Henry Riche, \*Tim Dwyer, °Bongshin Lee, °°Sheelagh Carpendale  
°Microsoft Research, USA  
\*Microsoft Corporation, USA  
°°University of Calgary, Canada

*Hierarchically Animated Transitions in Visualizations of Tree Structures*  
David Guilmaine, Christophe Viau, Michael J. McGuffin  
Ecole de technologie superieure, Canada

*Interactive graph matching and visual comparison of graphs and clustered graphs*  
°Mountaz Hascoet, \*Pierre Dragicevic  
°LIRMM, CNRS, Univ. Montpellier II, France  
\*INRIA, France

*MetricAttitude: A Visualization Tool for the Reverse Engineering of Object Oriented Software*

\*Michele Risi, °Giuseppe Scanniello

\*University of Salerno, Italy

°Università della Basilicata, Italy

*Metabrain: Web Information Extraction and Visualization*

°Joao Teixeira, °Gabriel Barata, \*Daniel Gonçalves

°Instituto Superior Técnico / INESC-ID, Portugal

\*INESC-ID, Portugal

## **10.30-12.55 Session 7.2 - Mobile Interfaces**

***Chair Yang Li***

*Room 'Cavalli'*

*Tap, Swipe, or Move: Attentional Demands for Distracted Smartphone Input*

°Matei Negulescu, °Jaime Ruiz, \*Yang Li, °Edward Lank

°University of Waterloo, Canada

\*Google Research, USA

*PalmSpace: Continuous Around-Device Gestures vs. Multitouch for 3D Rotation Tasks on Mobile Devices*

°Sven Kratz, °Michael Rohs, \*Dennis Guse, \*Jörg Müller, \*Gilles Bailly, \*Michael Nischt

°Mobile Interaction Lab, University of Munich, Germany

\*Telekom Innovation Laboratories, TU Berlin, Germany

*Spatial data and mobile applications - general solutions for interface design*

°Athula Ginige, \*Marco Romano, \*Monica Sebillio, \*Giuliana Vitiello, \*Pasquale Di Giovanni

°University of Western Sydney, Australia

\*University of Salerno, Italy

*Multimodal Framework for Mobile Interaction*

°Francesco Cutugno, \*Vincenza Anna Leano, \*Gianluca Mignini, \*Roberto Rinaldi

°LUSI-Lab, Dep. of Physics -University of Naples Federico II, Italy

\*USI-Lab University of Naples "Federico II", Italy

*User Experience of Photorealistic Urban Pedestrian Navigation*

Timo Partala, Miikka Salminen

Tampere University of Technology, Finland

*A Line-based Palm-top Detector for Mobile Augmented Reality*

Haruhisa Kato, Akio Yoneyama

KDDI R&D Laboratories Inc., Japan

*Indoor Navigation with Mixed Reality World-in-Miniature Views and Sparse Localization on Mobile Devices*

Alessandro Mulloni, Hartmut Seichter, Dieter Schmalstieg

ICG - Graz University of Technology, Austria

## **13.00-14.30 Lunch**

### **14.30-16.00 Session 8.1 - AR/VR Interfaces**

**Chair Aaron Quigley**

*Room 'Mediterranea'*

*An Augmented Interface to Audio-Video Components*

Andrea F. Abate, Fabio Narducci, Stefano Ricciardi

VRLab - University of Salerno, Italy

*ARMob - Augmented Reality for Urban Mobility in RMob*

°Fabrizio Borgia, \*Maria De Marsico, \*Emanuele Panizzi, \*Lorenzo Pietrangeli

°Université Toulouse III - Paul Sabatier, Sapienza Università di Roma, Italy

\*Sapienza Università di Roma, Italy

*Face-to-Avatar: Augmented Face-to-Face Communication with Aerotop Telepresence System*

°Hiroaki Tobita, \*Takuya Kuzi

°Sony CLS Paris, France

\*University of Electro-Communications, Tokyo, Japan

*Evaluating Depth Perception of Volumetric Data in Semi-Immersive VR*

Isaac Cho, Wenwen Dou, Zachary Wartell, William Ribarsky, Xiaoyu Wang

University of North Carolina at Charlotte, USA

*SpeechToast: Augmenting Notifications with Speech Input Focus*

Aj Bernheim Brush and Paul Johns

Microsoft Research

*Virtual Training of Surgery Staff for Hand Washing Procedure*

°Francesco Corato, \*Maria Frucci, \*Gabriella Sanniti Di Baja

°Facoltà di Ingegneria - Seconda Università degli Studi di Napoli

\*Istituto di Cibernetica E. Caianiello - CNR Italy

### **14.30-16.00 Session 8.2 - User-system Interaction**

**Chair Kent Wittenburg**

*Room 'Cavalli'*

*Statistics from an HCI perspective*

Jean Bernard Martens

Eindhoven University of Technology, The Netherlands

*Information Design in interactive applications for unfamiliar cultural domains*

Augusto Celentano

Universita' Ca' Foscari Venezia, Italy

*SWift - A SignWriting improved fast transcriber*

°Claudia Savina Bianchini, \*Fabrizio Borgia, °°Paolo Bottoni, °°Maria De Marsico

° Université Paris 8 ED-CLI, France

\* Université Paul Sabatier, France  
°°Sapienza University of Rome, Italy

*LiveMask: A Telepresence Surrogate System with a Face-Shaped Screen for Supporting Nonverbal Communication*

Kana Misawa, Yoshio Ishiguro, Jun Rekimoto  
The university of Tokyo, Japan

*co-Activity Manager: Integrating Activity-Based Collaboration into the Desktop Interface*

°Steven Houben, \*Jo Vermeulen, \*Kris Luyten, \*Karin Coninx  
°IT University, Denmark  
\*Hasselt University, Belgium

*Improving Blog Exploration through Interactive Visualization*

Nelson Marques, Ricardo Dias, Manuel J. Fonseca  
INESC-ID/IST/TU Lisbon, Portugal

## **16.00-16.30 Coffee break & System paper demos**

*An Integrated Ecosystem of Interfaces for Annotating, Querying and Browsing Networks of Web3D Worlds*

Fabio Pittarello, Ivano Gatto  
Università Ca' Foscari Venezia, Italy

*Interactive Surface that have Dynamic Softness Control*

Toshiki Sato, Nobuhiro Takahashi, Yasushi Matoba, Hideki Koike  
The University of Electro-Communications, Chofu, Japan

*Personal Photo Browser that can Classify Photos by Participants and Situations*

\*Tomoya Onishi, \*Ryosuke Tokunami, \*Yasuyuki Kono, °Satoshi Nakamura  
\*Kwansei Gakuin University, Japan  
° Kyoto University, Japan

*ISIDIS: an intelligent videosurveillance system*

\*Massimo De Gregorio, °Alessandro Rullo, Salvatore Rubinacci  
\*Istituto di Cibernetica, CNR, Pozzuoli, Italy  
°Neatec S.p.A., Pozzuoli, Italy

*Ambient Educational Mini-games*

\*Maria Korozi, \*Asterios Leonidis, \*George Margetis, \*Panagiotis Koutlemanis, \*Xenophon Zabulis,  
\*Margherita Antona, \*°Constantine Stephanidis  
\*Institute of Computer Science, Heraclion, Greece  
°University of Crete, Greece

*Interactive Exploration of Events and Presence of People in Space and Time through KD-Photomap*

\*Katerina Vrotsou, °Haolin Zhi, °Iulian Peca, °Gennady Andrienko, °Natalia Andrienko  
\*Linköping University, Norrköping, Sweden  
°Fraunhofer IAIS, Sankt Augustin, Germany



## **16.30-18.25 Session 9.1 - Adaptive Navigation Interfaces**

*Room 'Mediterranea'*

*GravNav: Using a Gravity Model for Multi-Scale Navigation*

Waqas Javed, Sohaib Ghani, Niklas Elmqvist  
Purdue University, USA

*Strip'TIC: Exploring Augmented Paper Strips for Air Traffic Controllers*

°Christophe Hurter, \*Rémi Lesbordes, °Catherine Letondal, °Jean-Luc Vinot, °Stéphane Conversy  
°ENAC, France  
\*DGAC, France

*Fluid Views: A Zoomable Search Environment*

Marian Dörk, Sheelagh Carpendale, Carey Williamson  
University of Calgary, Canada

*Stackables: Combining Tangibles for Faceted Browsing*

°Stefanie Klum, \*Petra Isenberg, °Ricardo Langner, \*Jean-Daniel Fekete, °Raimund Dachsel  
°University of Magdeburg, Germany  
\*INRIA, France

*Content-aware navigation for large displays in context of traffic control rooms*

°Tobias Schwarz, \*Simon Butscher, \*Jens Müller, \*Harald Reiterer  
°Siemens AG, Germany  
\*University of Konstanz

## **16.30-18.10 Session 9.2 - Visual Analytics**

**Chair Nathalie Riche**

*Room 'Cavalli'*

*Investigative Analysis across Documents and Drawings: Visual Analytics for Archeologists*

°Vincenzo Deufemia, °Luca Paolino, °Genoveffa Tortora, \*Viviana Mascardi, \*Massimo Ancona,  
\*Maurizio Martelli, \*Antonella Traverso, °°Nicoletta Bianchi, °°Henry de Lumley  
°University of Salerno, Italy  
\*University of Genova, Italy  
°°Laboratoire Départemental de Préhistoire du Lazaret, France

*Profiler: Integrated Statistical Analysis and Visualization for Data Quality Assessment*

\*Sean Kandel, \*Ravi Parikh, \*Andreas Paepcke, °Joseph M. Hellerstein, \*Jeffrey Heer  
\*Stanford University  
°University of California, Berkeley

*The Semantics of Clustering: Analysis of User-Generated Spatializations of Text Documents*

Alex Endert, Seth Fox, Dipayan Maiti, Scotland Leman, Chris North  
Virginia Tech, USA

*EgoNav: Exploring Networks through Egocentric Spatializations*

Martin Harrigan, Daniel Archambault, Padraig Cunningham, Neil Hurley  
University College Dublin, Ireland

## **Posters scheduled on Thursday, May 24th**

*S-Notebook: Augmenting Mobile Devices with Interactive Paper for Data Management*

°Thomas Pietrzak, \*Sylvain Malacria and °°Éric Lecolinet

°Université de Lille 1, France

\* University of Canterbury, New Zealand

°° Telecom ParisTech, France

*BroAuth: Evaluating Different Levels of Visual Feedback for 3D Gesture-Based Authentication*

Max-Emanuel Maurer, Rainer Waxenberger and Doris Hausen

University of Munich, Germany

*Redeeming Pedigree Data with an Interactive Error Cleaning Visualisation*

°Martin Graham, °Jessie Kennedy, \*Trevor Paterson, \*Andy Law

°Edinburgh Napier University, UK

\*The Roslin Institute, University of Edinburgh, UK

*Designing mobile access to DSpace-based digital libraries*

Isaias B. Da Rosa and David R. Lamas

Tallinn University, Estonia

*Formal Specification of Usability Measures in Model-driven Development of Context-sensitive User Interfaces*

°Mlađan Jovanović, \*Dušan Starčević and °Zoran Jovanovic

°Faculty of Electrical Engineering, Serbia

\*Faculty of Organizational Sciences, Belgrade University, Serbia

*Visual Analysis of Microblog Content Using Time-Varying Co-occurrence Highlighting in Tag Clouds*

Steffen Lohmann, Michael Burch, Hansjörg Schmauder and Daniel Weiskopf

University of Stuttgart, Germany

*ViDaX: An Interactive Semantic Data Visualisation and Exploration Tool*

Bruno Dumas, Tim Broché, Lode Hoste and Beat Signer

Vrije Universiteit Brussel, Belgium

*Design Guidelines for Correlated Quantitative Data Visualizations*

Vladimir Guchev, Massimo Mecella and Giuseppe Santucci

Sapienza Università di Roma, Italy

## **Workshops**

### **Monday, May 21**

*W1 - 3rd International Workshop on End User Development for Services (EUD4Services'2012 )*

Antonella de Angeli, University of Trento, Italy  
Nikolay Mehandjiev, University of Manchester, UK

*W2 - Supporting Asynchronous Collaboration in Visual Analytics Systems*

Nathalie Henry Riche, Kori Inkpen, Mary Czerwinski, Microsoft Research, Redmond, USA  
John Stasko, Georgia Institute of Technology, USA  
Tom Gross, University of Bamberg, Germany

*W3 - VIGTA 2012 – First International Workshop on Visual Interfaces for Ground Truth Collection in Computer Vision Applications*

Concetto Spampinato, University of Catania, Italy  
Bas Boom, University of Edinburgh, UK  
Jiyin He, Centrum Wiskunde & Informatica, Amsterdam, The Netherlands

## **Friday, May 25**

*W4 - PPD'12: Workshop on infrastructure and design challenges of coupled display visual interfaces*

Alan Dix, Birmingham University, UK  
Aaron Quigley, University of St Andrews, UK  
Miguel Nacenta, University of St Andrews, UK  
Tom Rodden, University of Nottingham, UK

*W5- Designing Collaborative Interactive Spaces*

Hans-Christian Jetter, Florian Geyer, Harald Reiterer, University of Konstanz, Germany  
Raimund Dachsel, Dresden University of Technology, Germany  
Gerhard Fischer, University of Colorado at Boulder, USA  
Rainer Groh, Technische Universität Dresden, Germany  
Michael Haller, Upper Austria University of Applied Sciences, Austria  
Thomas Herrmann, Ruhr University Bochum, Germany

## **Tutorials**

### **Monday, May 21**

#### **Tutorial 1 (9.00-13.00)**

*Intelligent Visual Interfaces : An Introduction*  
Mark T. Maybury, MITRE Corporation USA

#### **Tutorial 2 (14.30-17.30)**

*HCI Themes for the Future: Cultures of Participation, Meta-Design, and Social Creativity*  
Gerhard Fischer, University of Colorado at Boulder USA

### **Friday, May 25**

#### **Tutorial 3 (9.00-13.00)**

*Virtual and Augmented Reality Applications*

Lucio Tommaso De Paolis, University of Salento ITALY

**Tutorial 4 (14.30-17.30)**

*Scientific Evaluation in Visualization*

Camilla Forsell and Matthew Cooper, Linköping University Sweden