**6th Workshop on Software Engineering and Architectures for Realtime Interactive Systems**

17th of March in Orlando, Florida, USA

In conjunction with IEEE Virtual Reality 2013

### SEARIS 2013

**Description**

SEARIS provides a forum for researchers and practitioners working on the design, development, and support of realtime interactive systems (RIS). These systems span from Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) environments to novel Human-Computer Interaction systems (such as multimodal or multitouch architectures) and entertainment applications in general. Their common principle is a strong user centric orientation which requires real-time processing of simulation aspects as well as input/output events according to perceptual constraints. Therefore, we encourage researchers and developers of real-time human computer interaction systems of all flavors to share their experiences and learn from each other during this workshop.

The upcoming workshop will again feature **Personally Inspiring Publications** as an interesting new form of contribution, see next section for details.

SEARIS wants to account the state-of-the-art in software design and software engineering for realtime interactive systems, to shape a common understanding, to compare systems and approaches and derive common paradigms, to develop useful and necessary methods and techniques, and to foster new ideas. Topics of interest include (but are not limited to):

- **Architectures**: data-flow-oriented, object-oriented, component-based, scene graph(s), etc.
- **Abstraction mechanisms**: entity centered design, world descriptions, semantic modeling
- **Reusability/Extensibility**: plugins, components, modules, extension points, etc.
- **RIS Programming**: class libraries, scripting & core implementation languages, declarativity
- **System Issues**: operating systems, portability, networking, distribution, etc.
- **Adaptivity**: support of configurability, personalization, adaptation
- **Behavior**: support and integration of behavioral components (physics, AI, etc.)
- **Implementation and Testing** of Realtime Interactive Systems
- **Performance**: consideration of evaluation strategies, latency, synchronization, etc.

We highly welcome reflective and even controversial contributions.
Deadlines

- Abstract submission: January 18, 2013
- Paper submission: January 27, 2013
- Personally Inspiring Publications: January 27, 2013
- Notification of acceptance: February 8, 2013
- Camera-ready: February 17, 2013
- Workshop: March 17, 2013 (please check http://www.searis.net for updates)

Contributions

Following last year, research paper, position paper, and the state of the art reports will be included and indexed in the IEEE digital library.

Research Papers (6-8 pages)
Novel results in the field in the above mentioned categories related to RIS development.

Position Paper (6-8 pages)
Interesting and possibly controversial points of view of technical or technological advancements and approaches to foster a lively discussion at the event.

State of the Art Reports (6-8 pages)
Surveys on the main results in this field, which will allow us to understand and compare achievements and approaches in tackling RIS issues from the VR/AR/MR/HCI communities.

Personally Inspiring Publications (up to 3 publications)
Stop writing! Propose publications that are formative and inspiring to your work. You shortly present your personal highlights of the core ideas of the proposed publications at the workshop and we will find someone to rebut that discussion. SEARIS is five years old. Help us sift through the extant literature and build a unified core set of papers and principals.

Papers must be written in English and follow the IEEE Computer Society format found at:

http://www.cs.sfu.ca/~vis/Tasks/camera.html

Abstracts, full papers, and camera-ready versions have to be submitted electronically using the conference management tool found at the SEARIS website:  http://www.searis.net/

Personally Inspiring Publications have to be submitted via e-mail to:

searis@isg.cs.uni-magdeburg.de
Workshop Format

The SEARIS workshop will be a full-day event. Accepted authors for state of the art descriptions and discussion essays will present their ideas in a panel-like format. Accepted contributions for research papers will be organized in sessions consisting of presentations and discussions. Personally inspiring publications presentations will be followed by a rebuttal. Colleagues will be provided with the material and assigned as rebuttal leaders in advance.

During panels we will encourage the active participation of the audience. We expect this structure to provide a more focused discussions and a lively environment. Presenters will be asked to prepare a slide presentation of their accepted contribution. The general audience of this workshop will receive the workshop’s program with a set of questions in advance, which will guide the discussion in each topic’s panel.
Organizers

- Marc Erich Latoschik, Julius Maximilian University of Würzburg, Germany
- Dirk Reiners, University of Louisiana, Lafayette, USA
- Roland Blach, Fraunhofer IAO, Stuttgart, Germany
- Pablo Figueroa, Universidad de los Andes Bogota, Colombia
- Chadwick A. Wingrave, University of Central Florida, USA

Contact

- SEARIS email address (all co-organizers): searis@isg.cs.uni-magdeburg.de
- SEARIS web: http://www.searis.net/

Program Committee

—to be confirmed—

Roland Blach (CC Virtual Environments Fraunhofer IAO Stuttgart, Germany)
Raimund Dachselt (Otto-von-Guericke-Universität Magdeburg, Germany)
Pablo Figueroa (Universidad de los Andes Bogota, Colombia)
Marc Erich Latoschik (University of Würzburg, Germany)
Jean-Luc Lugrin (Teeside University, UK)
Bruno Raffin (INRIA, France)
Dirk Reiners (University of Louisiana, Lafayette, USA)
Anthony Steed (University College London, UK)
Henrik Tramberend (Beuth University, Berlin)
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