Third Workshop on Software Engineering and Architectures for Realtime Interactive Systems

SEARIS @ OOPSLA 2009

25th - 29th of October in Orlando, Florida, USA

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 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.

Until now, SEARIS was hold twice at the IEEE Virtual Reality Symposium, where the primary contributions were made by the VR, AR, and MR community. With the OOPSLA edition of SEARIS we want to to account the state-of-the-art in software design, to shape a common understanding, derive common paradigms, develop useful and necessary methods and techniques, and to foster new ideas. There is no doubt that both communities have a lot in common and can benefit from each other: RIS architects to extend their knowledge required for the development of complex systems and the OOPSLA community to gain insight into highly interactive multi-modal user interfaces and dynamic virtual worlds and their hidden issues. We would like to invite researcher and practitioners to submit contributions to the following and related topics:

- **Architectures for RIS**: data-flow-oriented, object-oriented, component-based, scene graph(s), etc.
- **Abstraction mechanisms in RIS**: entity centered design, world descriptions, semantic modeling
- **Reusability/Extensibility for RIS systems**: plugins, components, modules, extension points, etc.
- **RIS Programming**: class libraries, scripting languages, declarative languages
- **System Issues in RIS**: operating systems, platform independence, 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 are in particular interested in more reflective and even controversial contributions on these issues and related concepts rather than plain system descriptions.
Contributions

**State of the art reports** (6-8 pages)
looking for surveys on the main results in this field, which will allow our communities to understand achievements and approaches to tackle RIS issues from the OOPSLA and VR/AR/MR/HCI communities.

**Research Papers** (6-8 pages)
looking for novel results in the field, in the above mentioned categories related to RIS development

Papers must be written in English and follow the ACM SIGPLAN (11pt) style guidelines found at: [http://www.sigplan.org/authorInformation.htm](http://www.sigplan.org/authorInformation.htm)

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/](http://www.searis.net/)

Workshop Format

The SEARIS workshop will be a full-day event. Accepted authors for state of the art descriptions will present their ideas in a panel-like format. Accepted contributions for research papers will be organized in at most four sessions. Each session will have paper presentations and a discussion panel. 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 papers. 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. As in former workshops, contributions will be published in printed proceedings with an ISBN and also made available online.

Deadlines

- Abstract Submission: 21st of August 2009
- Paper Submission: 28th of August 2009
- Notification of acceptance: 1 week before OOPSLA early reg. deadline
- Camera-ready: 2nd of October 2009
- Workshop: 25th/26th of October 2009 (please check [http://www.searis.net](http://www.searis.net) for updates)

Organizers

- Marc Erich Latoschik, Bayreuth University, Germany
- Dirk Reiners, University of Louisiana, Lafayette, USA
- Roland Blach, CC Virtual Environments Fraunhofer IAO Stuttgart, Germany
- Pablo Figueroa, Universidad de los Andes Bogota, Colombia
- Raimund Dachselt, Otto-von-Guericke-Universität Magdeburg, Germany

Contact

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