The 13ᵗʰ International Symposium on
SMART GRAPHICS
August 26–28   Chengdu, Sichuan

Call for Papers

Overview

Advances in computer graphics have made visual media the heart of the user interface, and it is clear that graphics will continue to play a dominant role in knowledge work, entertainment, and the home. Indeed, as computers become more and more pervasive, as display sizes both increase and decrease, and as novel surface computing applications are conceived, new and challenging problems arise for the effective use, generation, and interpretation of computer graphics.

The International Symposium on Smart Graphics will bring together researchers from Computer Graphics, Visualization, Graphic Art & Graphic Design, Cognitive Psychology and Artificial Intelligence, all working on different aspects of computerl mediated, computerl generated, or computerl interpreted graphics— and the user experiences they enable. This year's meeting will be held in Chengdu, China.

Smart Graphics

Graphics become "Smart Graphics" when:

- Their design incorporates (and sometimes informs) a deeper understanding of human perception, cognition, and action in the form of design practice and/or cognitive science.
- Artificial intelligence drives the creation and interaction with graphics, often incorporating principles from graphic design and the cognitive science of visual representations.
- Graphics are designed to effectively support human cognition, communication, and collaboration, for example in the new field of visual analytics.

Scope

Smart Graphics is grounded in a deep understanding of human abilities, activities, and desires. This understanding arises through the integration of fields such as art, design, and the social, cognitive, and perceptual sciences. Insights are realized in the form of novel methods for producing and interacting with rich graphical displays—often utilizing established techniques from Computer Graphics, Artificial Intelligence, and Computer Science in general.

Such interfaces present content that

- engages the user and is aesthetically satisfying,
- participates in human cognition as external or distributed representations,
- is sensitive to the real-time demands of the interaction in the context of the available computational resources, and
- adapts the form of the output according to a wider set of constraints such as an individual's perceptual, attentive, and motor abilities and the nature of the presentation media and available interaction devices.

The 13th International Symposium on
SMART GRAPHICS
August 26–28   Chengdu, Sichuan

Website   http://www.smartgraphics.org/sg15/
E-Mail   smartgraphics2015@hotmail.com

Call for Papers

Scope (ctd.)   Smart Graphics research can be loosely divided into principles, methods and systems based research, and the symposium will encourage submissions in all these areas, based on the following characterization:

- **Principles:** Principles of Smart Graphics include: theories of graphics design and visual aesthetics, and theories of graphical representations and interaction, design and testing of graphical systems, constraints on technological, computational and human (perceptual, cognitive and motor) resources, conceptualizations of graphics and interactive systems, representation and reasoning requirements for Smart Graphics, interaction between resource restrictions, design, requirements capture and evaluation methodologies, systems that make people smart.
- **Methods:** New approaches to the design and testing of graphical generation, presentation and interaction for both conventional desk-top systems and new devices and media, acquisition and representation of design knowledge for Smart Graphics generation, empirical methods in the characterization of interaction, dealing with heterogeneous target media, application of planning, decision theory, optimization, constraint satisfaction, machine learning and other AI techniques to Smart Graphics, attentive systems, evaluation methods.
- **Systems:** The application of Smart Graphics to visualization, virtual reality, augmented reality, mobile communications, wearable computing, graphical hypermedia, web-based systems, novel interaction techniques (e.g. attentive systems, haptic and natural language interaction), and advisory & tutoring systems.

SG15 welcomes submissions from computer graphics, HCI & AI researchers and practitioners, cognitive scientists, graphic artists and graphic designers. We specially encourage young researchers to submit their ideas and results.

Call for Submissions   In 2015, we propose a specific emphasis on the integration of scientific research into the design of intelligent, context-aware digital media applications. In particular, we encourage discussion of research that pertains to interactions within the everyday world, using smart graphics and responsive media to enrich and augment experiences, culture, leisure, and work.

The 13th International Symposium on
SMART GRAPHICS
August 26–28 Chengdu, Sichuan

Call for Papers

Call for Submissions (ctd.)

Submission categories are divided into:

- Full research papers: these will encompass comprehensive descriptions of original work within the scope of the symposium (limited to 12 pages in Springer LNCS format).
- Posters: tentative or preliminary results of research or design work with emphasis on the interdisciplinary evaluation of the ideas (limited to 4 pages in Springer LNCS format). Poster papers will be included in the proceedings.
- System demonstrations: short descriptions of research or design work that the authors intend to show and discuss in a demo session at the symposium (limited to 2 pages in Springer LNCS format). System demonstration papers will be included in the proceedings.
- Arts track: computer animations, multimedia performance, interactive art, etc. Artists must submit a three page proposal outlining the concept and technique of the artwork, including a discussion of the relationship between smart technologies and their artistic and creative practice.
- An international jury of renowned scientists and artists will select the submissions. Selected works will be displayed during the Smart Graphics symposium, and presented to the public via an evening of performance, installation, and gallery exhibition at the compArt Center of Excellence Digital Art. A report of the arts track including all the selected works will be included in the proceedings.

Topics

Topics of interest include (but are not restricted to):

- computer graphics
- artificial intelligence
- cognitive science
- scene perception
- graphical abstraction
- graphics design
- virtual and mixed reality
- entertainment computing
- computational aesthetics
- information visualization
- visual analytics
- multimodal interfaces
- context-aware interfaces
- non-desktop interfaces
- surface computing
- sketch-based interfaces
- interaction design/user experience
- human-computer interaction
- interaction science
- user studies

The 13th International Symposium on
SMART GRAPHICS
August 26–28 Chengdu, Sichuan

Website   http://www.smartgraphics.org/sg15/
E-Mail   smartgraphics2015@hotmail.com

Call for Papers

Authors' Instructions

As in previous years, proceedings will be published in the Springer Lecture Notes in Computer Science (LNCS) series. Therefore, submissions are expected in the Springer LNCS format. You will find instructions for the preparation of your papers at Springer's Authors' Instructions page:

http://www.springer.com/computer+science/lncs?SGWID=0-164-6-793341-0

Important Dates

May 30, 2015	Submissions due
June 30, 2015	Notification of results
July 10, 2015	Camera-ready copy due
August 26–28, 2015	Symposium in Chengdu, Sichuan

Submission

In order to submit your anonymized paper for the doublel blind peer review process, please follow the instructions at http://www.smartgraphics.org/sg15/

Steering Committee

Pierre Boulanger (University of Alberta, Canada)
Roberto Theron (University of Salamanca, Spain)
Tsai-yen Li (National Chengchi University, Taiwan)
Marc Christie (INRIA/University of Rennes 1, France)

Organizing Committee

Marc Christie (IRISA/INRIA Rennes, France)

Yaxi Chen (Southwest University for Nationalities, China)

Program Committee

Elisabeth Andre (University of Augsburg, Germany)
William Bares (College of Charleston, USA)
Lutz Dickmann (University of Bremen, Germany)
David S. Ebert (Purdue University, USA)
Tracy Hammond (Texas A&M University, USA)
Hiroshi Hosobe (Tokyo National Institute of Informatics, Japan)
Hung-Hsuan Huang (Ritsumeikan University, Japan)
Christian Jacquemin (LIMSI-CNRS, France)
Tsvi Kuflik (University of Haifa, Israel)
Tong-Yee Lee (National Cheng-Kung University, Taiwan)
Wen-Hung Liao (National Chengchi University, Taiwan)
Kwan-Liu Ma (University of California at Davis, USA)
Carlos Delgado-Mata (Universidad Panamericana campus Bonaterra, Spain)
Shigeru Owada (Sony CSL)
Jian Peng (Sichuan University, China)
Roberto Ranon (University of Udine, Italy)
Mateu Sbert (University of Girona, Spain)
Tevfik Metin Sezgin (Koç University, Istanbul, Turkey)
Shigeo Takahashi (University of Tokyo, Japan)
Wenrong Tan (Southwest University for Nationalities, China)
Peng Wang (Chengdu University of Information Tchnology, China)
Xiaojing Wang (Chengdu Information Technology of Chinese Academy of Sciences Co., Ltd., China)
Thomas Rist (University of Applied Sciences, Germany)