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Smart Graphics

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Preface

The International Symposium on Smart Graphics 2006 was held during July 23–25, 2006, at the University of British Columbia in Vancouver, Canada. It was the seventh event in a series which originally started in 2000 as an AAAI Spring Symposium.

In response to the overwhelming success of the 2000 symposium, its organizers decided to turn it into a self-contained event. With the support of IBM, the first two International Symposia on Smart Graphics were held at the T.J. Watson Research Center in Hawthorne, New York, in 2001 and 2002. The 2003 symposium moved to the European Media Lab in Heidelberg. Since then the conference has alternated between North America and Europe. It was held at Banff Alberta Canada in 2004 and at the cloister Frauenwörth on the island of Frauenchiemsee in Germany in 2005.

The core idea behind these symposia is to bring together researchers and practitioners from the field of computer graphics, artificial intelligence, cognitive science, graphic design and the fine arts. Each of these disciplines contributes to what we mean by the term "Smart Graphics": the intelligent process of creating effective, expressive and esthetic graphical presentation. While artists and designers have been creating communicative graphics for centuries, artificial intelligence focuses on automating this process by means of the computer. While computer graphics provides the tools for creating graphical presentations in the first place, the cognitive sciences contribute the rules and models of perception necessary for the design of effective graphics. The exchange of ideas between these four disciplines has led to many exciting and fruitful discussions and the Smart Graphics symposia draw their liveliness from a spirit of open minds and the willingness to learn from and share with other disciplines

Many Smart Graphics symposia emphasize a particular aspect of the field in the call for papers. In a wrap-up session in 2005, workshop participants identified three key challenges for Smart Graphics that formed the basis for the 2006 workshop: (a) to understand human reasoning with visual representations, (b) in human decision support, to reconcile the complexity of problems that must be solved with the simplicity of representation and interaction that is desired by users, and (c) to build systems that can reason about and change their own graphical representations to meet the needs and abilities of their users and the nature of the information they present.

Accordingly this year's SG emphasized the "smart" in Smart Graphics. This includes human individual, group, and distributed cognition as well as artificial intelligence applied to the design and testing of graphically rich systems: smart design, smart systems, and systems for smart users. In order to facilitate interaction with the AI and Cogsci communities, we co-located SG with the

28th Annual Meeting of the Cognitive Science Society and the IEEE World Congress on Computational Intelligence.

We would like to thank all authors for the effort that went into their submissions, the Program Committee for their work in selecting and ordering contributions for the final program, and of course the participants who made Smart Graphics 2006 such a success.

Juli 2006

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Organization

Organization Committee

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The Smart Graphics Symposium 2005 was held in cooperation with Eurographics, AAAI and ACM Siggraph and the University of British Columbia.

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