CALL FOR PAPERS

AI EDAM Special Issue, August 2012, Vol. 26, No. 3
SKETCHING AND PEN-BASED DESIGN INTERACTION

Guest Editors: Levent Burak Kara & Maria C. Yang

Sketching is a primary medium for ideation and communication among humans, and it is widely used in tasks involving both synthesis (design, creation) and analysis (problem solving, modeling, editing, marking). The increased availability of supporting digital tools has caused interest in sketch-based interaction to surge considerably, and researchers have developed computational systems and applications that are capable of working from such input. The challenges along the way, however, have forced us to take a closer look at our knowledge of sketching and our interactions with sketches, because we realize how little we understand the way they facilitate and contribute to our creative tasks.

This Special Issue presents new research that will push the field forward and establish future directions in sketching and pen-based interaction. Thus, we are interested in theories, methods, systems, and experiments that shed light on the knowledge contained and communicated in sketches; the role of sketches in design, creativity, and problem solving; and the utility of sketches in both human–human and human–computer interaction.

We seek contributions from a variety of fields including engineering, computer science, cognitive sciences, psychology, architecture, and art. Accepted papers are expected to provide new insights and approaches to existing problems or identify new theories and problems that will fill the knowledge gap in the field. Both theoretical and computational studies are welcome.

Topics of interest include, but are not limited to, the following:

- Knowledge representation, capture, and reuse in sketching
- The role of sketching in design, creativity, problem solving, and cognition
- Sketch-based generative design
- Sketching in collaborative design
- Sketching and aesthetics
- Sketch recognition
- Sketch-based computer-aided design and solid modeling
- Novel sketch interfaces, visualization, and implications
- Applications in engineering, computer graphics, art, architecture, medicine, and so forth

All submissions will be anonymously reviewed by at least three expert reviewers, and the selection for publication will be made on the basis of these reviews. The criteria for acceptance will be based on the importance of the problem and the review of the literature, as well as the scientific approach, experiments or evaluations, and the significance of the results.

Information about the format and style required for *AI EDAM* papers can be found at www.cs.wpi.edu/~aiedam/Instructions/

Note that all inquiries and submissions for Special Issues go to the Guest Editors, **not** to the Editor in Chief.

Important Dates

Intent to submit (Title and Abstract):	As soon as possible
Submission deadline for full papers:	1 May 2011
Reviews due:	30 August 2011
Notification and reviews to authors:	30 September 2011
Revised version submission deadline:	15 January 2012

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