

Technical Sketches & Posters Fact Sheet

Chair: Zhigeng Pan, Zhejiang University
Conference: Monday 12 December – Thursday 15 December
Exhibition: Tuesday 13 December – Thursday 15 December

Fast Facts

- The Technical Sketches & Posters program is a dynamic forum for new and thought-provoking ideas, techniques, and applications in computer graphics and interactive techniques.
- The content of the Technical Sketches & Posters program ranges from academic research to industrial development and from practical tools to behind-the-scenes explanations of commercial and artistic works.
- Technical Sketches feature short illustrated presentations of about 15 minutes on an idea or concept, followed by a question-and-answer session. The future implications of these ideas will also be discussed.
- The Posters program features visual displays of incremental, preliminary, partial, and innovative insights that are important but not fully developed. Posters are displayed throughout the event, with a scheduled sharing session, where authors informally elaborate further on their ideas.
- The Technical Sketches & Posters program received 193 submissions, of which 38 were from China, Hong Kong and Taiwan.
- A total of 44 Technical Sketches and 58 Posters, of which 9 are from China, Hong Kong and Taiwan will be showcased and discussed at SIGGRAPH Asia 2011.

A Quote from the SIGGRAPH Asia 2011 Technical Sketches & Posters Chair:

“The Technical Sketches and Posters program serves as interactive forums for innovative ideas that have yet to take flight, a behind-the-scenes view of computer graphics and animation, and a showcase of solutions to challenging problems.

This year, the Technical Sketches & Posters Committee received a total of 193 submissions, the highest in SIGGRAPH Asia history. Out of the final accepted works of 102 Technical Sketches and Posters, we see a healthy 64.7 percent from Asia. These include participation from key institutions in Asia such as the Nanyang Technological University, Sun Yat-Sen University and the University of Tokyo, emphasizing the Technical Sketches and Posters program’s role in creating opportunities, demonstrating future technology breakthrough and educating the industry.”

SIGGRAPH Asia 2011 Technical Sketches & Posters Program Highlights

- **Screen Space Animation of Fire (Technical Sketch)**
Martin Guay, Université de Grenoble, Institut national de recherche en informatique et en automatique (INRIA)
Fabrice Colin, Université Laurentienne
Richard Egli, Université de Sherbrooke

This technical sketch demonstrates a simple and physically-inspired method to animate realistic-looking fire directly in 2D instead of along a 3D simulation. This means that animators can render and animate hundreds of fires at interactive rates.

- **Beady: Interactive Beadwork Design and Construction (Technical Sketch)**

Yuki Igarashi, University of Tsukuba

Takeo Igarashi, University of Tokyo, ERATO

Jun Mitani, University of Tsukuba, ERATO

An interactive system to assist the design and construction of customized 3D beadwork is proposed in this technical sketch. The system will also provide a visual step-by-step guide to assist manual beadwork construction process.

- **Towards Hairstyle Reconstruction Using Thermal Imaging (Technical Sketch)**

Tomás Lay Herrera and Andreas Weber, Institut für Informatik II, Universität Bonn

Arno Zinke, GfaR mbH

This technical sketch presents a novel technique for generating fiber-based hair models from video sequences captured by a hand-held infrared camera.

- **Stereoscopic 3D Experience Optimization Using Cropping and Warping (Technical Sketch)**

Lin Hong-Shang, Lee Chu-Tien and Ming Ouhyoung, Taiwan University

Guan Shuen-Huei, Digimax

The purpose of this technical sketch is to demonstrate the optimization of the stereoscopic 3D experience. In this technical sketch, five principles to reduce visual fatigue and enhance depth perception by cropping and warping are proposed.

- **3D Animation Education in the US and Japan (Technical Sketch)**

Miho Aoki, University of Alaska Fairbanks

Wobbe Koning, Montclair State University

Ayumi Myai, Computer Graphics Arts Society

Takahito Kamihira, Senshu University

This technical sketch discusses the differences and similarities of a 3D animation education in the US and Japan.

- **Simulating Facial Expressions Using Anatomically Accurate Biomechanical Model (Poster)**

Alice Pui-Lam Hung, Tim Wu, Kumar Mithraratne and Peter Hunter, Auckland Bioengineering Institute, University of Auckland

This poster shows how animators can simulate facial expressions using anatomically accurate biomechanical models with active muscle contractions.

Full information for the Technical Sketches & Posters Program can be found on <http://www.siggraph.org/asia2011/technical-sketches-posters>.

For more information on SIGGRAPH Asia 2011 program updates, please visit www.siggraph.org/asia2011.