

## Fact Sheet – Posters

Chair : Qunsheng Peng, Zhejiang University, China  
Co-Chair : Haizhou Li, Institute for Infocomm Research, A\*STAR, Singapore  
Conference : Wednesday 28 November – Saturday 1 December 2012  
Exhibition : Thursday 29 November – Saturday 1 December 2012

The Posters Program in SIGGRAPH Asia 2012 has seen a strong focus on rendering and display towards real-time and realism with applications in mobile and interactive graphics systems. The Posters program provides a dynamic forum for new and thought-provoking ideas, techniques, and applications in computer graphics and interactive techniques.

### Fast Facts

The Posters Program content ranges from academic research to industrial development and from practical tools to behind-the-scenes explanations of commercial and artistic work. Posters are displayed throughout the conference week in a high-traffic area within the convention centre.

The Posters Program will also organize special tracks with specific thematic focus. The regular area and topics include, but are not limited to technical and research work; art and design; games; animation and visual effects; education; and applications. 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.

In summary, the Posters Program received 105 submissions from Asian countries, and 15 submissions from outside Asia, showing a strong interest and presence of Asian research community in SIGGRAPH Asia.

### Quote from the SIGGRAPH Asia 2012 Posters Chair, Qunsheng Peng, Zhejiang University, China

"The Posters Program serves as a technical forum for freshest ideas that have achieved exciting preliminary results. This year, the Posters Program is separated from Technical Briefs to become an independent program, receiving a total of 120 submissions, 46 of them were selected from a stringent review process. Each paper was reviewed by primary, secondary and tertiary reviewers. The Posters Program is a high quality technical program with a balanced view across regular technical areas."

### SIGGRAPH Asia 2012 Posters Highlights

#### ***Real-time Graphical Presentation from Empirical Data for Virtual Welding Tasks***

Dongsik Jo, Yongwan Kim, Ungyeon Yang, and Ki-Hong Kim, Electronics and Telecommunications Research Institute (ETRI), Korea  
Sangho Shin, Total Soft Bank

This poster presents a method of real-time graphical presentation from empirical data for welding tasks under virtual reality (VR) environments.

***VisibilityChunk: Average Directional Visibility for Importance Sampling***

Yu-Ting Wu and Yung-Yu Chuang, National Taiwan University

This poster proposes VisibilityChunk, a method for efficient computation and compact representation of the visibility function. Significant noise reduction can be achieved by integrating it into importance sampling techniques.

***Synthesizing Structured Doodle Hybrids***

Thomas Hurtut, UFR Maths-Info  
Pierre-Edouard Landes, Université Paris Descartes, France

Given a set of input doodles, this approach synthesizes similar, yet all unique, hybrids doodles. It is based on a hierarchical jitter/relaxation algorithm of the inputs strokes.

***Efficient Post-Processing Antialiasing on Integrated GPUs***

Alexander Reshetov, Alexei Soupikov, and Thomas Raoux, Intel

This poster presents an improved morphological antialiasing algorithm that runs 2.5x faster on Intel HD graphics than the previous state-of-the-art GPU implementation. The source code is provided.

***Keyframe Control of Cumulus Cloud Simulation***

Katsutoshi Kusumoto, Yoshinori Dobashi, and Tsuyoshi Yamamoto, Hokkaido University

This poster presents a new method for controlling the simulation of cloud formation so that cumulus clouds that change into specified shapes can be animated.

***A Songwriting Support System with a Card***

Hiroaki Sawano, Takuya Iwata, Terumasa Ikeda, and Takaaki Hishida, Aichi Institute of Technology

In this poster, a song writing support system is proposed with a card writing a phrase and a melody line by a user, and the target of the user is the beginning of song writing.

***Shadow-Supported Object Reconstruction***

Fabian Wanner, Jan Kautz, and Niloy Mitra, University College London

Shadows and Self-Shadowing provide a lot of additional information about the structure and shape of an object. This UK team uses these shadows to simplify the reconstruction process and improve results.

***Building an Extended Mobile Interface Space using projection-based mobile phone***

Jeongyun Kim, Hayoung Kim, and Seunggho Chao, Yonsei University

The interface space of a small display area in a mobile phone is extended by using the projector. The tools like paper, pencil, and eraser are used as a metaphor.