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Preface

The program for EGSR 2012 follows a long tradition of papers that help shape the field of rendering and push its boundaries. In addition to traditional topics such as physically-based rendering, real-time rendering, and material modeling, the conference features other contributions including inverse problems, acquisition, non-photorealistic rendering, or digital fabrication. We are excited by the papers and look forward to the presentations!

We received 69 submissions, a healthy increase from last year's 60. Based on the reviews, and after a week-long discussion process, the International Program Committee members recommended 21 for acceptance, and referred four more to Computer Graphics Forum with major revisions. This puts the acceptance rate at about 30%, and 36% when CGF is included, confirming EGSR as a selective venue.

The international program committee was composed of AAA members from all around the world, and each paper received at least four reviews, three from committee members, and one from an external reviewer. The selection process was entirely blind this year, and committee members did not know the authors or affiliations of the papers they were deciding upon. This required extra logistics for the selection of external reviewers, and committee member had to suggest a couple of options, which were checked by the program chairs to avoid conflicts of interest.

Last, we would like to thank:

- All authors for submitting such great work to EGSR
- The International Program Committee members and the external reviewers who all did an impressive and thorough evaluation of the submissions
- Stefanie Behnke for her constant assistance during all the steps of the process
- Oliver Deussen and Holly Rushmeier for their help with the CGF process
- Tamy Boubekeur and Elmar Eisemann, the local conference chairs
- George Drettakis and the EGSR steering committee for their guidance

We hope you enjoy this year's program!

Frédo Durand and Diego Gutierrez
EGSR 2012 Program Chairs

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Keynote

Big Data and the Pursuit of Visual Realism

Alexei Efros

Abstract

Over the last few years, the Internet has developed into a gargantuan depository of visual data (photos, videos, webcams, etc) captured by people (and machines) all over the globe. A pressing research question is how this visual data could be useful in graphics as a way of “crowd-sourcing” visual realism? In this talk, I will give an overview of some of the recent work (both from our lab and elsewhere) on using large online image collections to transfer visual appearance as a way of synthesizing novel visual content. I will also touch upon the idea of visual data mining and (appropriately for the venue) ask “what makes Paris look like Paris?”.

Short Biography

Alexei “Alyosha” Efros is an associate professor at the Robotics Institute and the Computer Science Department at Carnegie Mellon University, while also maintaining strong ties to the INRIA/ENS team WILLOW in Paris. His research is in the area of computer vision and computer graphics, especially at the intersection of the two. He is particularly interested in using data-driven techniques to tackle problems which are very hard to model parametrically but where large quantities of data are readily available. Alyosha is a recipient of CVPR Best Paper Award (2006), NSF CAREER award (2006), Sloan Fellowship (2008), Guggenheim Fellowship (2008), Okawa Grant (2008), Finmeccanica Career Development Chair (2010), ECCV Best Paper Honorable Mention (2010), and SIGGRAPH Significant New Researcher Award (2010).

Keynote

Where Did All These Pixel Colors Come From ???

Eric Tabellion

Abstract

Full length animated feature films have boomed over the past decade. Throughout this period, I have had the opportunity to work on many different rendering algorithms and techniques, some inspired by academia, some by other film studios. I have also had the pleasure to see math and code blossom into beautiful imagery, in the hands of very talented artists. In this talk I will relate this journey through a survey of the rendering pipeline, tools and techniques that we have used in the production of over a dozen CG animated feature films. I will show a multitude of examples to illustrate the rendering scale and highlight our past, present and future challenges.

Short Biography

Eric Tabellion is a rendering principal engineer in the R&D group at DreamWorks Animation, where he has been working on film production rendering since 1999. Eric's work has been primarily focused on practical global illumination using irradiance caching, raytracing, physically-based and point-based approaches. Eric also worked on various aspects of computer graphics, such as rendering shadows, realistic reflections and refractions, efficient post-process motion-blur and depth of-field algorithms, fluid surface reconstruction techniques, as well as particle and crowd simulation systems. Eric was awarded a Technical Achievement Academy Award in 2010 for his work on global illumination. He graduated with a Masters in computer science from the Université de Marne-la-Vallée in 1996. Eric's movie credits include all DreamWorks animated films from "Shrek" to date.