



Eurographics 2009

March 30 - April 3, 2009
Munich, Germany

Tutorials

Tutorials Chairs

Ken Museth, Digital Domain Inc., USA
Daniel Weiskopf, Universität Stuttgart, Germany

Published by
The Eurographics Association
ISSN 1017-4656

Table of Contents

Table of Contents	ii
Preface	iii
External Reviewers	iv
Author Index	v

T1

Tutorial on Sketch Recognition	1
<i>T. Hammond, B. Paulson, and B. Eoff</i>	

T2

Modeling Individualities in Groups and Crowds	5
<i>Stéphane Donikian, Nadia Magnenat-Thalmann, Julien Pettré, and Daniel Thalmann</i>	

T3

Interactive Shape Modeling and Deformation	11
<i>Olga Sorkine and Mario Botsch</i>	

T4

GPU-Based Volume Ray-Casting with Advanced Illumination	39
<i>Markus Hadwiger, Patric Ljung, Christof Rezk-Salama, and Timo Ropinski</i>	

T5

Meshless Approximation Methods and Applications in Physics Based Modeling and Animation ...	213
<i>Bart Adams and Martin Wicke</i>	

T6

3D Anatomical Modelling and Simulation Concepts	241
<i>Nadia Magnenat-Thalmann, J. Schmid, Hervé Delingette, M. Agus, and J. A. Iglesias Guitian</i>	

T7

Analysis and Retrieval Techniques for Motion and Music Data	249
<i>Meinard Müller</i>	

Preface

The Eurographics Tutorials have built a strong reputation as an integral piece of the Eurographics Annual Conference. This year's Tutorials Program shows every sign to follow in the footsteps of previous years' success. Based on external reviews from an international group of experts the tutorial chairs are proud to announce that Eurographics 2009 will offer the following tutorials:

1. "Introduction to Sketch Recognition" (full-day)
2. "Modeling Individualities in Groups and Crowds" (full-day)
3. "Interactive Shape Modeling and Deformation" (half-day)
4. "GPU-Based Volume Ray-Casting with Advanced Illumination" (half-day)
5. "Meshless Approximation Methods and Applications in Physics Based Modeling and Animation" (half-day)
6. "3D Anatomical Modelling and Simulation Concepts" (half-day)
7. "Analysis and Retrieval Techniques for Motion and Music Data" (half-day)

The main selection criteria were the general interest and popularity of the topic, scientific quality of the submitted proposal as well as the presenter team. A strong program like the current is not possible without the help and work of many individuals. Foremost we are of course very thankful to all the authors for submitting such high-quality tutorial proposals. This was reflected in a very high acceptance rate. Secondly we wish to thank all the external reviewers for their hard work and professionalism. Last but not least the tutorial chairs wish to extend great appreciation to Stefanie Behnke for her help with the publication process, and the EG 2009 Co-chair Rüdiger Westermann for his general support and trust in our judgments.

Ken Museth and Daniel Weiskopf
Tutorials Chairs, Eurographics 2009
February 2009

External Reviewers

Norman Badler, University of Pennsylvania
Axel Bernd, Universität Magdeburg
David E. Breen, Drexel University
Robert Bridson, University of British Columbia
Yiorgos Chrysanthou, University of Cyprus
Mathieu Desbrun, California Institute of Technology
Abhijeet Ghosh, University of Southern California
Kai Hormann, TU Clausthal
Thomas Klein, NVIDIA
Jens Krüger, University of Utah
Klaus Mueller, Stony Brook University
Soraia Raupp Musse, PUCRS
Bernhard Preim, Universität Magdeburg
Faramarz F. Samavati, University of Calgary
Eric Saund, Palo Alto Research Center
Peter Schröder, California Institute of Technology
Tamara Smyth, Simon Fraser University
Matthias Teschner, Universität Freiburg
Holger Theisel, Universität Magdeburg
Henrik Wann Jensen, University of California, San Diego
Hao Zhang, Simon Fraser University

Author Index

- | | | | |
|-------------------------------|-----|--------------------------------|--------|
| Adams, Bart | 213 | Magnenat-Thalmann, Nadia | 5, 241 |
| Agus, M. | 241 | Müller, Meinard | 249 |
| Botsch, Mario | 11 | Paulson, B. | 1 |
| Delingette, Hervé | 241 | Pettré, Julien | 5 |
| Donikian, Stéphane | 5 | Rezk-Salama, Christof | 39 |
| Eoff, B. | 1 | Ropinski, Timo | 39 |
| Guitian, J. A. Iglesias | 241 | Schmid, J. | 241 |
| Hadwiger, Markus | 39 | Sorkine, Olga | 11 |
| Hammond, T. | 1 | Thalmann, Daniel | 5 |
| Ljung, Patric | 39 | Wicke, Martin | 213 |