



Workshop on
Computer Graphics
 Current Trends in Research and Industry

WORKSHOP PROGRAM



July 9th-10th, 2007
 Department of Computer Science
 Lahore University of Management Sciences

Time	July 9th, 2007	July 10th, 2007
1400	Shehryar Hydri Computer Graphics in Pakistan	Asif Iqbal Character Animation in Pakistan - Past, Present, and Future
1415		
1430		
1445		
1500	Mashhuda Glencross The Problem of Causality in Collaborative Virtual Environments	Erik Reinhard High Dynamic Range Display Algorithms
1515		
1530		
1545	Erum Khan Image-based Material Editing	Erum Khan High Dynamic Range Imaging
1600		
1615		
1630	Holly Rushmeier Applications of Computer Graphics in Cultural Heritage	Myra Ali Exploring CG Business Opportunities
1645		
1700		
1715	Tea Break (Executive Dining Hall)	Charles Hughes Mixed Reality
1730		
1745		
1800		
1815	Irfan Essa Computational Photography and Video	Tea Break (Executive Dining Hall)
1830		
1845		
1900	Break	Joseph LaViola Mathematical Sketching: An Approach for Creating and Exploring Dynamic Illustrations
1915		
1930		
1945	Amy Gooch Image Manipulation through Preserving Perceptual Differences	Break
2000		
		James Davis Acquiring computer graphics models of people

Please email your comments or suggestions to cawshop@gmail.com

Speaker Biographies

Exploring CG Business Opportunities in Local and International Markets

Myra Ali, *Creative Manager, Emaar, Pakistan*

Myra Ali is the Creative Manager of Emaar Pakistan. Before joining Emaar, she was the Chief Operating Officer of Anivista Animation Studios. She holds a masters degree in Animation and Visual Effects from Savannah College of Art and Design, USA

Acquiring computer graphics models of people

Dr. James Davis, *University of California, Santa Cruz, USA*

James Davis is an Assistant Professor in Computer Science at the University of California, Santa Cruz. His research expertise is in computer graphics, machine vision, and sensing systems for building digital models of the real world. He was previously a senior research scientist at Honda Research Institute, and received his PhD from Stanford University and BS from UC Davis.



Computational Photography and Video

Dr. Irfan Essa, *Georgia Institute of Technology, USA*

Irfan Essa is an Associate Professor in the College of Computing, Georgia Institute of Technology (GA Tech), in Atlanta, Georgia. Irfan Essa works in the areas of Computer Vision and Computer Graphics and founded the Computational Perception Laboratory (CPL) at GA Tech in 1996. He joined GA Tech Faculty in 1996 after his earning his MS (1990), Ph.D. (1994), and holding research faculty position at the Massachusetts Institute of Technology (Media Lab) [1988-1996].

The Problem of Causality in Collaborative Virtual Environments

Dr. Mashhuda Glencross, *University of Manchester, UK*

Mashhuda Glencross received her first degree in polymer science in 1992, the MSc degree in computer science in 1994, and the PhD degree in 2000, studying interactive physically-based modeling. She is a postdoctoral research associate in the Advanced Interfaces Group at The University of Manchester, United Kingdom. Her research interests span the areas of physically based modeling, collaborative virtual environments, and haptics.



Image Manipulation through Preserving Perceptual Differences

Dr. Amy Gooch, *University of Victoria, Canada*

Amy Ashurst Gooch is an assistant professor at the University of Victoria in British Columbia, Canada. Amy earned her BS in Computer Engineering and MS in Computer Science from the University of Utah. Amy earned her PhD in Computer Science June 2006 at Northwestern University, where she was also a

researcher and instructor. Her current research is part of an interdisciplinary effort involving computer graphics, perceptual psychology, and computational vision.

Computer Graphics in Pakistan

Shehryar Hydri, *COO, Trango Interactive, Pakistan*

Shehryar Hydri is the Chief Operating Officer of Trango Interactive. Trango Interactive is an independent game development company with a focus on PC and Mobile Game Development. Their flagship game engine, Helios 2.0, is currently under development. Their first game title is a PC based Third Person Shooter (TPS) using Helios 1.0. Trango has also developed a generic game engine for mobile devices and has been providing mobile game content to international clients.

Mixed Reality

Dr. Charles Hughes, *University of Central Florida, USA*

Charles Hughes is a professor and graduate coordinator of Computer Science in the College of Engineering and Computer Science. Hughes is the director and chief scientist of the Media Convergence Laboratory, which is working with emerging technologies in entertainment, education and training. He received his B.A. from Northeastern University in 1966 and his MS and PhD from Pennsylvania State University in 1968 and 1970 respectively.

Character Animation in Pakistan - Past, Present, and Future

Asif Iqbal, *CEO, Post Amazers, Pakistan*

Asif Iqbal Qadri spent 12 years in the postproduction & animation industry in many countries, particularly in the Far Eastern region. Post Amazers under Asif's guidance and leadership, today has become a pioneer in providing the best ever animation facilities in Pakistan for both local and international markets, while offering a complete array of post production & other services. With a team of over 80 animators, Post Amazers today has the largest human resource to be ever employed by any local animation studio in Pakistan.

Image-based Material Editing

Dr. Erum Khan, *Lahore University of Management Sciences, Pakistan*

Erum Khan has a Ph.D. in Computer Graphics from the University of Central Florida. Her interests include the application of color theory and human visual perception to develop solutions for computer graphics and vision problems. She is also co-author of "Color Imaging: Fundamentals and Applications", which is to be published at the end of this year.



Mathematical Sketching: An Approach for Creating and Exploring Dynamic Illustrations

Dr. Joseph LaViola, *University of Central Florida, USA*

Joseph J. LaViola Jr. is currently an assistant professor in Computer Science at the University of Central Florida. His primary research interests include pen-based interactive computing, 3D interaction techniques, predictive motion tracking, multimodal interaction in virtual environments, and user interface evaluation. Joseph received a Sc.M. in Computer Science in 2000, a Sc.M. in Applied Mathematics in 2001, and a Ph.D. in Computer Science in 2005 from Brown University.

High Dynamic Range Display Algorithms

Dr. Erik Reinhard, *University of Bristol, UK*

Erik Reinhard received his Ph.D. in Computer Science from the University of Bristol in 2000. Following a postdoctoral position at the University of Utah (2000-2002) and assistant professor at the University of Central Florida (2002-2005), he returned to Bristol as a lecturer in January 2006. Erik founded the prestigious ACM Transactions on Applied Perception, and has been Editor-in-Chief since its inception in 2003.



Applications of Computer Graphics in Cultural Heritage

Dr. Holly Rushmeier, *Yale University, USA*

Holly Rushmeier received the BS, MS and PhD degrees in Mechanical Engineering from Cornell University in 1977, 1986 and 1988 respectively. Dr. Rushmeier was Editor-in-Chief of ACM Transactions on Graphics from 1996-99. She has also served on the editorial board of IEEE Transactions on Visualization and Computer Graphics. She is currently on the editorial boards of IEEE Computer Graphics and Applications and Computer Graphics Forum.