

ACM VRST 2004 Program

Start	End	Nov. 10	Nov. 11	Nov. 12
08:30		Registration (Scope Entrance)		
	08:45	Welcome Speech (SLT)		
09:00		Keynote 1 SLT	Keynote 2 SLT	Keynote 3 SLT
10:10		Coffee Break (Scope Lobby)		
10:30		Session 1A SLT	Session 2A SLT	Session 3A SLT
12:35		Lunch City Chinese Restaurant		Lunch City Top
14:00		Session 1B SLT	Session 2B (Short Papers) SLT	Tutorial A SET1
15:40		Coffee Break (Scope Lobby)		
16:00		Session 1C SLT	Session 2C (Short Papers) SLT	Tutorial B SET1
17:40		Local Tour meet at University Circle		
18:00		Reception SCM	Banquet Jade Garden Restaurant	
22:00				

Venue	Address
SLT (Scope Lecture Theatre)	City University of Hong Kong
SET1 (Room SET1)	City University of Hong Kong
SCM (School of Creative Media)	SCM Lab Area (ACAD-Red Zone 2/F), City University of Hong Kong
City Chinese Restaurant	8/F Amenities Building, City University of Hong Kong
City Top	9/F Amenities Building, City University of Hong Kong
Jade Garden Restaurant	4/F, Star House, Tsim Sha Tsui, Kowloon (Tel: 2730-6888)
University Circle	City University of Hong Kong

Day 1: Nov. 10

Keynote 1

09:00-10:10 **Turning VR Inside Out: Thoughts about Where We are Heading**
Steven Feiner

Session 1A: Object Interactions and Collisions

Chair: Qunsheng Peng

10:30-10:55 **Fast and Reliable Collision Culling using Graphics Hardware**
Naga K. Govindaraju, Ming C. Lin, Dinesh Manocha

10:55-11:20 **Interactive Collision Detection for Complex and Deformable Models using Programmable Graphics Hardware**

Wei Chen, Huagen Wan, Hongxin Zhang, Hujun Bao, Qunsheng Peng

11:20-11:45 **The Grappl 3D Interaction Technique Library**

Mark Green, Joe Lo

11:45-12:10 **Multi-Layered Deformable Surfaces for Virtual Clothing**

Wingo Wong, George Baciu, Jinlian Hu

12:10-12:35 **Animating Reactive Motions for Biped Locomotion**

Taku Komura, Howard Leung, James Kuffner

Session 1B: Animation and Simulations

Chair: Gerard Kim

14:00-14:25 **Animating Complex Hairstyles in Real-Time**

Pascal Volino, Nadia Magnenat-Thalmann

14:25-14:50 **A Lightweight Algorithm for Real-Time Motion Synthesis**

Katsuki Kawachi, Takeo Kanade, Hiromasa Suzuki

14:50-15:15 **Marker-free Kinematic Skeleton Estimation from Sequences of Volume Data**

Christian Theobalt, Edilson de Aguiar, Marcus A. Magnor, Holger Theisel, Hans-Peter Seidel

15:15-15:40 **Scalable Pedestrian Simulation for Virtual Cities**

Soteris Stylianou, Marios M. Fyrillas, Yiorgos Chrysanthou

Session 1C: Human Interactions and Perceptions

Chair: David Roberts

16:00-16:25 **Observing Effects of Attention on Presence with fMRI**

Sungkil Lee, Gerard Jounghyun Kim, Janhan Lee

16:25-16:50 **Supporting Social Human Communication between Distributed Walk-in Displays**

David Roberts, Robin Wolff, Oliver Otto, Dieter Kranzmueller, Christoph Anthes, Anthony Steed

16:50-17:15 **Using a Vibro-tactile Display for Enhanced Collision Perception and Presence**

Jonghyun Ryu, Gerard Jounghyun Kim

17:15-17:40 **FreeWalk/Q: Social Interaction Platform in Virtual Space**

Hideyuki Nakanishi, Toru Ishida

Day 2: Nov. 11

Keynote 2

09:00-10:10 **Recent Advances in Visibility Determination for Large and Complex Virtual Environments**
Daniel Cohen-Or

Session 2A: Applications and Systems

Chair: Hanqiu Sun

10:30-10:55 **Scanning and Rendering Scene Tunnels for Virtual City Traversing**
Jiang Yu Zheng, Yu Zhou, Min Shi

10:55-11:20 **Modeling and Rendering of Walkthrough Environments with Panoramic Images**
Angus M.K. Siu, Ada S.K. Wan, Rynson W.H. Lau

11:20-11:45 **Design and Evaluation of a Wind Display for Virtual Reality**
Taeyong Moon, Gerard Jounghyun Kim

11:45-12:10 **GameOD: An Internet Based Game-On-Demand Framework**
Frederick W.B. Li, Rynson W.H. Lau, Danny Kilis

12:10-12:35 **A CAVE System for Interactive Modeling of Global Illumination in Car Interior**
Kirill Dmitriev, Thomas Annen, Grzegorz Krawczyk, Karol Myszkowski, Hans-Peter Seidel

Session 2B: Real-time Interactions and Rendering (Short Papers)

Chair: Yiorgos Chrysanthou

14:00-14:20 **Towards Full-Body Haptic Feedback: The Design and Deployment of a Spatialized Vibrotactile Feedback System**
Robert W. Lindeman, Robert Page, Yasuyuki Yanagida, John L. Sibert

14:20-14:40 **An Efficient Representation of Complex Materials for Real-Time Rendering**
Wan-Chun Ma, Sung-Hsiang Chao, Bing-Yu Chen, Chun-Fa Chang, Ming Ouhyoung, Tomoyuki Nishita

14:40-15:00 **Huge Texture Mapping for Real-Time Visualization of Large-Scale Terrain**
Wei Hua, Huaisheng Zhang, Yanqing Lu, Hujun Bao, Qunsheng Peng

15:00-15:20 **A Voxel Based Multiresolution Technique for Soft Tissue Deformation**
Lenka Jerabkova, Torsten Kuhlen, Timm P. Wolter, Norbert Pallua

15:20-15:40 **A Framework for 3D Visualisation and Manipulation in an Immersive Space using an Untethered Bimanual Gestural Interface**
Yves Boussemart, Francois Rioux, Frank Rudzicz, Michael Wozniowski, Jeremy R. Cooperstock

Session 2C: Techniques and Applications (Short Papers)

Chair: Yoshifumi Kitamura

16:00-16:20 **The MORGAN Framework: Enabling Dynamic Multi-User AR and VR Projects**
Jan Ohlenburg, Iris Herbst, Irma Lindt, Thorsten Frohlich, Wolfgang Broll

16:20-16:40 **Fast Model Tracking with Multiple Cameras for Augmented Reality**
Alberto Sanson, Umberto Castellani, Andrea Fusiello

16:40-17:00 **Occlusion Handling for Medical Augmented Reality using a Volumetric Phantom Model**
Jan Fischer, Dirk Bartz, Wolfgang Strasser

17:00-17:20 **NOYO: 6DOF Elastic Rate Control for Virtual Environments**
Andreas Simon, Mario Doulis

17:20-17:40 **Tailor Tools for Interactive Design of Clothing in Virtual Environments**
Michael Keckeisen, Matthias Feurer, Markus Wacker

Tutorial A

13:40-15:40 **From Visual Simulation to Virtual Reality to Games**
Michael Zyda

Tutorial B

16:00-18:00 **Populating Virtual Cities with Avatars: Practical Solutions**
Yiorgos Chrysanthou, Daniel Cohen-Or, Celine Loscos and Franco Tecchia

Day 3: Nov. 12

Keynote 3

09:00-10:10 **Reality-augmented Virtuality: Modeling Dynamic Events from Nature**
Marcus Magnor

Session 3A: Devices and Haptics

Chair: Taku Komura

10:30-10:55 **Transpost: All-Around Display System for 3D Solid Image**

Rieko Otsuka, Takeshi Hoshino, Youichi Horry

10:55-11:20 **Telerehabilitation: Controlling Haptic Virtual Environments through Handheld Interfaces**

Mario Gutierrez, Patrick Lemoine, Daniel Thalmann, Frederic Vexo

11:20-11:45 **Multi-resolution Haptic Interaction of Hybrid Virtual Environments**

Hui Chen, Hanqiu Sun

11:45-12:10 **Electrostatic Tactile Display with Thin Film Slider and Its Application to Tactile Tele-Presentation Systems**

Akio Yamamoto, Shuichi Nagasawa, Hiroaki Yamamoto, Toshiro Higuchi

Site Map

