May 23							
Room	Auditorium	Room 2 (H8-	Room 3 (H8-	Room 4 (H4-			
		01.144.165)	01.145.175)	02.232.080)			
9:00 - 10:30	Cultural Heritage	AniNex I	Digital Patient I				
	Digitization I						
10:30 - 11:00	Coffee break						
11:00 - 12:45	Cultural Heritage	AniNex II	Digital Patient				
	Digitization II		II				
12:45 – 14:00	Lunch break						
14:00 - 15:30	Cultural Heritage	Dr Inventor I	fromROLLtoBag	Affective Virtual			
	Digitization III		I	Humans and			
				Social Robots I			
15:30 - 16:00	Coffee break						
16:00 - 17:30	Cultural Heritage	Dr Inventor II	fromROLLtoBag	Affective Virtual			
	Digitization IV		II	Humans and			
				Social Robots II			

May 24						
Room	Auditorium	Room 2 (H8-	Room 3 (H8-	Room 4 (H4-		
		01.144.165)	01.145.175)	02.232.080)		
9:00 - 9:15	Opening Session					
	Room: Auditorium					
9:15 - 10:00	<u> </u>	Keynote "Autonomous Robot Learning through Interaction with Humans"				
	Assist. Prof. Dongheui Lee, Technical University of Munich, Germany					
	Chair: Nadia Magnenat Thalmann, University of Geneva, Switzerland and NTU,					
	Singapore Room: Auditorium					
10:00 - 10:30	Coffee break					
10:30 - 12:00	Session 1 Medical		Session 3	Session 2		
			Character	Crowd Simulation		
			Animation			
12:00- 13:15		Lunch b				
13:15 – 14:00	Keynote "How Social Biometrics and Cognitive Intelligence Changing the Way					
	We Perceive Our World"					
	Prof. Marina L. Gavrilova, University of Calgary, Canada					
	Chair: Nadia Magnenat Thalmann, University of Geneva, Switzerland and NTU, Singapore					
		Room: Auditorium				
14:00 – 15:00	Session 4 GPU	Session 5 Physics	Session 6			
	Processing	Simulation	Natural			
			Phenomena			
15:00 – 15:30		coffee break				
15:30 – 17:00	Session 7 Medical	Session 8 Crowd		Session 9		
		Simulation		Recognition and		
				Tracking		
19:30 – 22:30	CASA	2015 Conference Ding	ner			

May 25						
Room	Auditorium	Room 2 (H8-	Room 3 (H8-	Room 4 (H4-		
		01.144.165)	01.145.175)	02.232.080)		
9:00 - 9:45	Keynote "Gami	amification with virtual characters at the borders of mixed				
	realities and algebras"					
	Assist. Prof. George Papagiannakis, University of Crete and FORTH, Greece					
	Chair: Daniel Thalmann, NTU, Singapore and EPFL, Switzerland					
		Room: Auditorium				
9:45 - 10:30	Session 10	Session 11	Special	Session 12		
	Telepresence	Populations and	Workshop on	Recognition and		
		Cities	<b>China Animation</b>	Tracking		
10:30 - 11:00	Coffee break					
11:00 - 13:00	Session 13 -	Session 14 Social	Special	Session 15		
	Rendering	and Virtual	Workshop on	Locomotion		
		Agents	<b>China Animation</b>			
13:15 – 14: 30	Lunch break					
14:30 - 15:15	Session 16 Image	Session 17 Lights		Session 18 Fluid		
	and Video	and Sound		Simulation		
	Processing					
15:15 – 16:15	Session 19					
	Character					
	Animation					
16:15 – 16:45	Coffee break					
16:45 – 17:15	- 17:15 Paper award ceremony and closing session					
		Room: Auditorium				

## Session 1: Medical Modelling and Simulation 1 (Chair: Frederic Cordier, University Of Haute Alsace, France)

- L1 Yanzhen Wang, Ferdinand Serracino-Inglott, Xiaodong Yi, Xue-Feng Yuan and Xue-Jun Yang. Real-time Simulation of Catheterization in Endovascular Surgeries
- L2 Yunku Kang, Jaesung Park, Minsub Shim, Jaewook Lee and Myung-Soo Kim. Compact Modeling and Plausible Deformation of Human Lung Anatomy with Smooth Surfaces
- L3 Guanglei Wang, Bin Wang, Qinguo Gang, Suiping Zhou and Xiuling Liu. Physical Modeling of Vascular Tissues and Stress Analysis Optimization Based on Real Soft Tissue Characteristics

#### Session 2: Crowd Simulation 1 (Chair: Daniel Thalmann, NTU, Singapore and EPFL, Switzerland)

- L4 Glen Berseth, Mubbasir Kapadia and Petros Faloutsos. ACCLMesh: Curvature-Based Navigation Mesh Generation
- L5 Linbo Luo, Cheng Chai, Suiping Zhou, Jianfeng Ma. Modeling Gap Seeking Behaviors for Agent-based Crowd Simulation
- L6 Tsung-Yu Tsai, Sai Keung Wong, Yi-Hung Chou and Guan-Wen Lin. Directing Virtual Crowds Based On Dynamic Adjustment of Navigation Fields

#### Session 3: Character Animation 1 (Chair: Dongheui Lee, Technical University of Munich, Germany)

- L7 Kang Hoon Lee and Myung Geol Choi. A Path Browser for Exploratory Motion Assembly
- L8 Myung Geol Choi and Kang Hoon Lee. Points-Based User Interface for Character Posing
- L9 Chenlei Wu and Takashi Kanai. Data-Driven Detailed Hair Animation for Game Characters

#### Session 4: GPU Processing (Chair: George Papagiannakis, University of Creete and Forth, Greece)

- L10 Junjie Xue, Gang Zhao and Wenlei Xiao. An Efficient GPU Out-of-core Framework for Interactive Rendering of Large-scale CAD Models
- L11 Ping Li and Hanqiu Sun. Density-Enhanced Perceptual Mosaic Using GPU Parallelism

## Session 5: Physics Simulation (Chair: Sung-Hee Lee, KAIST, Korea)

- L12 Guiqing Li, Yaobin Ouyang, Guodong Wei, Zhibang Zhang and Aihua Mao. Enhanced Rig-Space Simulation
- L13 -Se-Joon Chung and Nancy Pollard. Se-Joon Chung and Nancy Pollard. Predictable Behavior During Contact Simulation: A Comparison of Selected Physics Engines

## Session 6: Natural Phenomena (Chair: Sai Keung Wong, National Chiao Tung University, Taiwan)

L14 - Jong-Hyun Kim, Jaeho Im, Chang Hun Kim and Jung Lee. Subtle Features of Ice with Cloudy Effects and Scratches from Collision Damage

L15 - Bradley Kimmel and Gladimir Baranoski. Practical Acceleration Strategies for the Predictive Visualization of Fading Phenomena

# Session 7: Medical Modelling, Simulation and Motion Capture 2 (Chair: Nadia Magnenat Thalmann, University of Geneva, Switzerland & NTU, Singapore)

- L16 Kun Qian, Tao Jiang, Meili Wang, Xiaosong Yang and Jianjun Zhang. Energized Soft Tissue Dissection in Surgery Simulation
- L17 Yanzhen Wang, Ferdinand Serracino-Inglott, Xiaodong Yi, Xue-Jun Yang and Xue-Feng Yuan. An Interactive Computer-based Simulation System for Endovascular Aneurysm Repair Surgeries
- L18 Zhao Wang, Yinfu Feng, Shuang Liu, Jun Xiao, Xiaosong Yang and Jun Zhang. A 3D human motion refinement method based on sparse motion bases selection

## Session 8: Crowd Simulation 2 (Chair: Daniel Thalmann, NTU, Singapore and EPFL, Switzerland)

- L19 Athanasios Krontiris, Kostas E. Bekris and Mubbasir Kapadia. ACUMEN: Activity-Centric Crowd Authoring Using Influence Maps
- L20 Brandon Haworth, Muhammad Usman, Glen Berseth, Mahyar Khayatkhoei, Mubbasir Kapadia and Petros Faloutsos. CODE: Crowd Optimized Design of Environments
- S22 Paul Zikas, Margarita Papaefthymiou, Vasilis Mpaxlitzanakis and George Papagiannakis. Lifesized Group and Crowd simulation in Mobile AR (short)

## Session 9: Recognition and Tracking 1 (Chair: Marina Gavrilova, University of Calgary, Canada)

- L23 Simon Senecal, Louis Cuel, Andreas Aristidou and Nadia Magnenat-Thalmann. Continuous body emotion recognition system during theater performances
- L24 Shuang Liu, Xiaosong Yang, Zhao Wang, Zhidong Xiao and Jianjun Zhang. Real Time Online Facial Expression Transfer with Single Video Camera
- L25 Tiberiu Popa, David Birkas and Krisztian Birkas. A Mobile System for Scene Monitoring and Object Recognition

## Session 10: Telepresence (Chair: Ari Shapiro, University of Southern California, USA)

- L26 Claudia Kuster, Nicola Ranieri, Jean-Charles Bazin, Tobias Martin, Pierre-Yves Laffont, Tiberiu Popa and Markus Gross. An Immersive Bidirectional System for Life-size 3D Communication
- S27 Jihye Oh, Youjin Lee, Yeonjoon Kim, Taeil Jin, Sukwon Lee and Sung-Hee Lee. Hand Contact between Remote Users through Virtual Avatars (short)

#### Session 11: Population and cities (Chair: Jian Jun Zhang, Bournemouth University, UK)

- L28 Abdullah Bulbul and Rozenn Dahyot. Populated Virtual Cities using Social Media
- S29 Rui Filipe Antunes and Nadia Magnenat Thalmann. Bio-Inspired Populations: Adaptive Behavior with Affective Feedback (short)

## Session 12: Recognition and Tracking 2 (Chair: Marina Gavrilova, University of Calgary, Canada)

- L30 Sohaib Laraba and Joëlle Tilmanne. Dance Performance Evaluation Using Hidden Markov Models
- S31 Faisal Ahmed, Padma Polash Paul and Marina Gavrilova. Joint-Triplet Motion Image and Local Binary Pattern for 3D Action Recognition Using Kinect (short)

#### Session 13: Rendering (Chair: Wencheng Wang, Chinese Academy of Sciences Beijing, China)

- L32 Xin Yang, Qi Liu, Pengfei Zhang, Lutong Xin, Dongsheng Zhou and Yuxin Wang. DKD: A Fast KD-Tree Update Design for Dynamic Scenes
- L33 Tianhao Gao, Wencheng Wang and Honglei Han. Efficient View Selection by Measuring Proxy Information
- L34 Ulises Olivares, Héctor Rodríguez and Félix F. Ramos. Efficient Construction of Bounding Volume Hierarchies into a Complete Octree for Ray Tracing
- S35 Dan Casas, Andrew Feng, Oleg Alexander, Graham Fyffe, Paul Debevec, Ryosuke Ichikari, Hao Li, Kyle Olszewski, Evan Suma and Ari Shapiro. Photorealistic Blendshape Modeling from RGB-D Sensors (short)
- S36 Akila Elhaddad, Feriel Elhaddad, Bin Sheng, Shuai Zhang, Hanqiu Sun and Enhua Wu. Real-Time Cloud Simulation Using Lennard-Jones Approximation (short)

## Session 14: Social and Virtual Agents (Chair: Frederic Cordier, University Of Haute Alsace, France)

- L37 Jaroslaw Kochanowicz, Ah-Hwee Tan and Daniel Thalmann. Social Context Cognition Crowd-Sourcing and Semi-Automatic Parametrization
- L38 Jian Cui, Arjan Kuijper and Alexei Sourin. Understanding people's mental models of mid-air interaction for virtual assembly and shape modeling
- L39 Pierre De Loor, Romain Richard, Julien Soler and Elisabetta Bevacqua. Aliveness metaphor for an evolutive gesture interaction based on coupling between a human and a virtual agent
- L40 Christos Kyrlitsias and Despina Michael. Asch conformity experiment using immersive virtual reality

## Session 15: Locomotion (Chair: Ronan Boulic, EPFL, Switzerland)

- L41 Yingying Wang, Kerstin Ruhland, Michael Neff and Carol O'Sullivan. Walk the Talk: Coordinating Gesture with Locomotion for Conversational Characters
- L42 Daseong Han, Seokpyo Hong, Junyong Noh, Xiaogang Jin and Joseph S. Shin. Online Real-time Locomotive Motion Transformation Based on Biomechanical Observations
- L43 Pamela Carreno-Medrano, Sylvie Gibet and Pierre-François Marteau. From Expressive End-Effector Trajectories to Expressive Bodily Motions

S44 - Ronan Boulic, Utku Evci, Eray Molla and Phanindra Pisupati. One Step from the Locomotion to the Stepping Pattern (short)

# Session 16: Image and Video Processing (Chair: Marinos Ioannides, Cyprus University of Technology)

- L45 Ning Liu, Dengming Zhu and Zhaoqi Wang. Pipelining Image Compositing in Heterogeneous Networking Environments
- S46 Damon Shing-Min Liu and Chi-Wei Huang. Exploring Spatial and Temporal Coherence to Strengthen Seam Carving in Video Retargeting (short)

## Session 17: Lights, Cameras, and Sound (Chair: George Papagiannakis, University Of Creete & Forth, Greece)

- L48 Takuya Yamakawa, Yoshinori Dobashi and Tsuyoshi Yamamoto. Efficient Simulation of Furniture Layout Taking into Account Lighting Environment
- S49 Katsutsugu Matsuyama and Kouichi Konno. A Framework for Manipulating Multi-Perspective Image Using A Parametric Surface (short)
- S50 Iana Podkosova, Michael Urbanek and Hannes Kaufmann. A Hybrid Sound Model for 3D Audio Games with Real Walking (short)
- L47 Ning Liu, Dengming Zhu and Zhaoqi Wang. Progressive Light Volume for Interactive Volumetric Illumination

#### Session 18: Fluid Simulation (Chair: Hangiu Sun, Chinese University Of Hong Kong)

- L51 Liqun Cui, Chunyong Ma and Ge Chen. Physical-based Spatio-temporal Resolution Enhancement of Scalar Data for Fluid Visualization
- L52 Cheng Yang, Xubo Yang and Xiangyun Xiao. Data-driven Projection Method in Fluid Simulation
- L53 Takuya Imai, Yoshihiro Kanamori and Jun Mitani. Real-Time Screen-Space Liquid Rendering with Complex Refractions
- S54 Hange Song and Shiguang Liu. Dynamic Fluid Visualization Based on Multi-level Density (short)

## Session 19: Character Animation (Chair: Jian Jun Zhang, Bournemouth University, UK)

- L55 Myung Geol Choi and Kang Hoon Lee. Interactive Control of Big-Object Manipulation Animation
- L56 Jong In Choi, Sun Jeong Kim, Chang Hun Kim and Jung Lee. Let's be a virtual juggler