WELCOME

It is a great pleasure to welcome you to the 2011 IEEE International Symposium on Haptic Audio-Visual Environments and Games (HAVE 2011) and the 4th International Workshop on Massively Multiuser Virtual Environments (MMVE 2011), which take place jointly at Yanshan University, Qinhuangdao, Hebei, China from October 15th to 16th, 2011.

HAVE 2011 marks the 10th edition of the HAVE annual workshop series. We are proud to announce that we have received more than 50 papers from 10 different countries and regions. After a rigorous peer-review process, 29 papers for HAVE 2011 and 7 papers for MMVE 2011 were accepted for oral or poster presentation at the conference, resulting in 7 technical sessions. We regret that some excellent papers could not be accommodated.

Similar to the events of previous years, there will be a TIM special issue devoted to the topics covered by the conference. All accepted HAVE 2011 and MMVE 2011 papers that are registered and presented at the conference are eligible to submit an extended version to the special issue by November 29th, 2011. These manuscripts must be technically extended beyond the scope of the paper that appears in the conference.

Like the edition of previous years, HAVE 2011 is the result of dedicated effort by a large number of volunteers. We wish to express our appreciation and thanks to all the individuals who have contributed to HAVE 2011 and MMVE 2011. Special thanks are extended to our colleagues in the Program Committee for their thorough review of all the submissions, which is vital to the success of this conference. We must also extend our thanks to all the members in the Organizing Committee and our volunteer students who have dedicated their time and efforts in promoting, organizing and helping the conference. Last but not least, our special thanks go to all the authors for contributing their research work, and to the participants in making HAVE 2011 and MMVE 2011 a memorable event.

Thank you and wish you a great conference and enjoyable visit in Qinhuangdao.
HAVE 2011 Program

October 15, 2011 Saturday

8:00 – 8:30 -- Registration

8:30 – 8:35 – Opening and Welcome
Peter X. Liu, Abdulmotaleb El Saddik
Shun-Yun Hu, Shervin Shirmohammadi, Gregor Schiele

8:35 – 9:20 – Keynote
Prof. Jinyuan Jia (Tongji University, China)

9:20 – 10:40 – Technical Session I
Session Chair: Peter X. Liu

9:20: Implementation and Evaluation of a gesture-based Input Method in Robotic Surgery
Christoph Staub (Technische Universität München, Germany);
Alois Knoll (Technical University Munich Garching, Germany);
Salman Can (Technische Universität München, Germany);
Verena Nitsch (University of the Bundeswehr Munich, Germany);
Ines Karl (University of the Bundeswehr Munich, Germany);
Berthold Faerber (University of the Bundeswehr Munich, Germany)

9:40: A 3D FE Dynamic Model of Human Fingertip Based on MRI Data
Zhongkui Wang (Ritsumeikan University, Japan)

10:00: Adaptive Hybrid Motion/Force Control of Bilateral Tele-operation with Unsymmetrical Time-Varying Delays
Zhijun Li (Shanghai Jiao Tong University, China);
Wenjun Ye (Shanghai Jiao Tong University, China)

10:20: Color-based corner detection by color invariance
Jun Chu (Nanchang Hangkong University, China);
Jun Miao (Nanchang Hangkong University, China);
Guimei Zhang (Nanchang Hangkong University, China);
Lu Wang (Nanchang Hangkong University, China)

10:40-11:00 -- Coffee Break
11:00 –12:20 – Technical Session II
Session Chair: Abdulmotaleb El Saddik

11:00: RehaBall: Rehabilitation of Upper limbs with a Sensory-Integrated Stress Ball
Ali Karime (University of Ottawa, Canada); Abu Saleh Md Mahfujur Rahman (University of Ottawa, Canada); Abdulmotaleb El Saddik (University of Ottawa, Canada); Wail Gueaieb (University of Ottawa, Canada);

11:20: Spring-based measurement equipment for evaluation of 3-DOF haptic rendering algorithms
Zhixiang Wang (Beihang University, China); Dangxiao Wang (Beihang University, China); Tao Song (Beihang University, China)

11:40: Human Action Recognition from Local Part Model
Feng Shi (University of Ottawa, Canada); Emil M. Petriu (University of Ottawa, Canada); Albino Cordeiro (University of Ottawa, Canada)

12:00: A Local Constraint Method for Needle Insertion Modeling and Simulation
Lijuan Wang (Ritsumeikan University, Japan)

12:30-13:50 -- Lunch

14:00 –15:20 – Technical Session III
Session Chair: Guimei Zhang

14:00: Activity-Centric Streaming of Virtual Environments and Games to Mobile Devices
Hesam Rahimi (University of Ottawa, Canada); Ali Asghar Nazari Shirehjini (University of Ottawa, Canada); Shervin Shirmohammadi (University of Ottawa, Canada)

14:20: Labeling Watershed Algorithm based on Morphological Reconstruction in Color Space
Guimei Zhang (Nanchang Hangkong University, China)

14:40: Opening the Haptic Loop: Network Degradation Limits for Haptic Task Performance
Rahul Chaudhari (TU Munich, Germany); Clemens Schuwerk (Technische Universität München, Germany); Verena Nitsch (University of the Bundeswehr Munich, Germany); Eckehard Steinbach (Munich University of Technology, Germany);
Berthold Faerber (University of the Bundeswehr Munich, Germany)

15:00: Transparency Performance Improvement for Bilateral Teleoperation with Direct Force-feedback Control
Changchun Hua (Yanshan University, China);
Yana Yang (Yanshan University, China)

15:20-15:40 -- Coffee Break

15:40 –17:20 – Technical Session IV
Session Chair: Mehdi Ammi

15:40: Hybrid Signal-based and Geometry-based Prediction for Haptic Data Reduction
Xiao Xu (Munich University of Technology, Germany);
Julius Kammerl (Munich University of Technology, Germany);
Rahul Chaudhari (Munich University of Technology, Germany);
Eckehard Steinbach (Munich University of Technology, Germany)

16:00: Design of Haptic Stimuli for Audio-Haptic concurrent coupling
Mehdi Ammi (University of Paris-Sud 11, France);
Brian Katz (LIMSI, France)

16:20: Improvement of the recognition of facial expressions with haptic feedback
David Bonnet (LRI, France);
Mehdi Ammi (University of Paris-Sud 11, France);
Jean-Claude Martin (Limsi-CNRS, France)

16:40: Dynamic Load Redistribution Based on Migration Latency Analysis for Distributed Virtual Simulations
Robson De Grande (University of Ottawa);
Azzedine Boukerche (University of Ottawa)

17:00: A Study of the Effects of Using Some QoS Mechanisms on Haptic Transmission-Using Opnet Modeler
Aseel Alturki (King Saud University, Saudi Arabia);
M A Alnuem (King Saud University, Saudi Arabia)

18:00 -20:00 -- Dinner
October 16, 2011 Sunday

8:30 – 9:50 – Technical Session I
Session Chair: Fuchun Sun

8:30: EDA-based Output Tracking Control for Networked Control Systems with Time Delays and Packet Losses
HongBo Li (Tsinghua University); Fuchun Sun (Tsinghua University); Zengqi Sun (Tsinghua University)

8:50: Revocable Handwritten Signatures with Haptic Information
Abdulmotaleb El Saddik (University of Ottawa, Canada); Marwa Fouad (University of Ottawa, Canada); Emil M. Petriu (University of Ottawa, Canada)

9:10: A Novel Haptic Jacket based Alerting Scheme in a Driver Fatigue Monitoring System
Abu Saleh Md. Mahfujur Rahman (University of Ottawa, Canada); Niloufar Azmi (University of Ottawa, Canada); Shervin Shirmohammadi (University of Ottawa, Canada); Abdulmotaleb El Saddik (University of Ottawa, Canada)

9:30: Event-based Tele-presence of a Mobile Service Robot
Xiaohui Zhu (Shanghai Jiao Tong University, China); Zhijun Li (Shanghai Jiao Tong University, China); Wenjun Ye (Shanghai Jiao Tong University, China); Haoran Zhao (Shanghai Jiao Tong University, China)

9:50-10:10 -- Coffee Break

10:10 –11:30 – Technical Session II
Session Chair: Yi Wan

10:10: A Prototype Haptic EBook System to Support Immersive Remote Reading in a Smart Home
Abu Saleh Md. Mahfujur Rahman (University of Ottawa, Canada); Kazi Masudul Alam (University of Ottawa, Canada); Abdulmotaleb El Saddik (University of Ottawa, Canada)

10:30: Coherent Hierarchical Collision Detection for Clothing Animation
Hanwen Li (Lanzhou University, China); Yi Wan (Lanzhou University, China)

10:50: Low-Complexity Error-Resilient Data Reduction Approach for Networked
Haptic Sessions
Fernanda Brandi (Munich University of Technology, Germany);
Eckehard Steinbach (Munich University of Technology, Germany)

11:10: Modeling and $H_{\infty}$ Control of Wireless Network-based Bilateral Teleoperation
Caiyong Ye (Yanshan University, China);
Changchun Hua (Yanshan University, China)

11:30-13:50 – Closing

12:00-14:00 – Farewell Lunch

Poster Papers :
A Novel Haptic Rendering Algorithm Based on Vector Median Filter
Liyuan Zhou (Nanchang University, China);
Shaoping Xu (Nanchang University, China);
Chunquan Li (Nanchang University, China);

Adaptive Kernels for Data Recovery in Tele-haptic and Tele-operation Environments
Jason P Rhinelander (Carleton University, Canada);
Peter Liu (Carleton University, Canada);

The Feedback Force Algorithm for the Wave-Variable Teleoperator With High Stability
Lingyan Hu (Nanchang University, China);
Guoping Liu (Nanchang University, China);
Shaoping Xu (Nanchang University, China)
MMVE 2011 Program

October 15, 2011 Saturday

8:00 – 8:30 -- Registration

8:30 – 8:35 – Opening and Welcome
Abdulmotaleb El Saddik, Peter X. Liu
Shun-Yun Hu, Shervin Shirmohammadi, Gregor Schiele

8:35 – 9:20 – Keynote
Prof. Guangzheng Fei (Communication University of China)
Prof. Jinyuan Jia (Tongji University, China)

9:20 - 10:40 – Paper Session 1
Session Chair: TBD

9:20: The XFire Online Meta-Gaming Network: Observation and High-Level Analysis
Siqi Shen (Delft University of Technology, Netherlands)
Alexandru Iosup (Delft University of Technology, Netherlands)

10:00: Getting Real - Self-Organized Resource Allocation on Second Life Avatar Traces
Jean Botev (University of Luxembourg, Germany)
Wei Tsang Ooi (National University of Singapore, Singapore)
Ingo Scholtes (University of Trier, Germany)

10:40-11:00 -- Coffee Break

11:00 - 12:00 – Short Papers and Posters
Session Chair: TBD

11:00: Finding the best tradeoff between multi resolution content reproduction quality and multi resolution content distribution efficiency
Romain Cavagna (LIP6-CNRS, UPMC, France)
Maha Abdallah (LIP6-CNRS, UPMC, France)

11:20: Specifying Consistency Requirements for Massively Multi-User Virtual Environments
Laura Itzel (University of Mannheim, Germany)
Richard Sueselbeck (University of Mannheim, Germany)
Gregor Schiele (University of Mannheim, Germany)
Christian Becker (University of Mannheim, Germany)
11:40: *Interactive Scalable Crowdcasting*
Shun-Yun Hu (Academia Sinica, Taiwan)

12:30-13:50 -- *Lunch*

14:00 - 15:20 – *Paper Session 2*
*Session Chair: TBD*

14:00: *Crowd Buzz: Scalable Audio Communication for MMVEs using Latency Optimized Hypercube Gossiping*
Philipp Berndt (Technische Universität Berlin, Germany)
Matthias Hovestadt (Technische Universität Berlin, Germany)
Odej Kao (Technische Universität Berlin, Germany)

14:20: *Pithos: A State Persistency Architecture for Peer-to-Peer Massively Multiuser Virtual Environments*
John S. Gilmore (University of Stellenbosch, South Africa)
Herman A. Engelbrecht (University of Stellenbosch, South Africa)

15:20-15:40 -- *Coffee Break*

15:40 - 17:00 – *Open Discussion: Open Research in MMVE systems*
*Session Chair: TBD*