Day 1: October 10, 2014

9:00 – 10:00 Keynote Speech

10:00 – 10:15 Coffee Break

10:15 – 11:55 Paper Session 1: Interaction with Virtual and Real Objects

Haptic Dissection of Deformable Objects using the Extended Finite Element Method

Ziyun Li, Ling Jin, Jochen Lang, Emil M. Petriu

Haptic Simulation of Needle-tissue Interaction Based on Shape Matching

Yuan Tian, Yin Yang, Xiaohu Guo, Balakrishnan Prabhakaran

Programming Manipulation Tasks by Demonstration in Visuo-Haptic Augmented Reality

Jacopo Aleotti, Giorgio Micconi, Stefano Caselli

Displaying Haptic Interaction with a Synthesized Model of Real Objects Using SPIDAR-mouse

Kikuo Asai, Norio Takase, Makoto Sato

11:55 – 1:30 Lunch

1:30 – 3:10 Paper Session 2: Therapy and Intervention

Guided Physical Therapy Through the Use of the Barrett WAM Robotic Arm

Scott Phan, Cyril Lutterodt, Alexandros Lioulemes, Fillia Makedon, Vangelis Metsis

Interaction with Virtual Spiders for Eliciting Disgust in the Treatment of Phobias

Miroslav Cavrag, Guillaume Larivière, Ana-Maria Cretu, Stéphane Bouchard

Development of a Low-Cost Tactile Sleeve for Autism Intervention

Fei Tang, Ryan McMahan, Tandra Allen

Synchronized walking cadence for TUG in perturbed environments: using Earcon or Tacton cues ?

Thomas Imbeault-Nepton, Martin Otis

3:10 – 3:25 Coffee Break

3:25 – 5:05 Paper Session 3: Rehabilitation and Training

Event-based haptic vibration synthesis using a recursive filter for lower limb prosthetics

Pascal Fortin, Martin Otis, Vincent Duchaine, Jeremy R Cooperstock

A Real Time, Distributed Haptic Interface for Fine Motor Skill Rehabilitation

Shanthi Vellingiri, Yuan Tian, Balakrishnan Prabhakaran

A Toolkit for Motion Authoring and Motor Skill Learning in Serious Games

Ramin Tadayon, Troy L McDaniel, Sethuraman Panchanathan, Bijan Fakhri, Miles Laff

Haptic Simulations for Training Plumbing Skills

James Jose, Radhakrishnan Unnikrishnan, Delmar Marshall, Rao R. Bhavani

7:00 -- Banquet Dinner

Day 2: October 11, 2014

9:00 – 10:40 Paper Session 4: Tactile Perception

TOP: Tactile Opinion Poll System for Silent Feedback

Mohamad Eid, Nour Radi AlGharibeh, Katy Blumer

Mobile Phone Short Message Tacton Notification Based on Mood and Urgency

Hussein Al Osman, Alexandre Pilon, Abdulmotaleb El Saddik

Visual-to-Tactile Mapping of Facial Movements for Enriched Social Interactions

Shantanu Bala, Troy L McDaniel, Sethuraman Panchanathan

FiTouch: Adapting Graphical User Interface for Touch Interaction

Li Liu, Jingyuan Zhang, Xu Yin

10:40 – 10:55 Coffee Break

10:55 – 12:10 Doctoral Symposium

12:10 – 1:45 Lunch

1:45 – 3:25 Paper Session 5: Perception, Evaluation, and Service

On the Discrimination of Stiffness during Pressing and Pinching of Virtual Springs

Burak Cizmeci, Eckehard Steinbach, Giulia Paggetti, Cem Dillioglugil

Human Gesture Quantification: an Evaluation Tool for Somatic Training and Piano Performance

Pierre Payeur, Jillian Beacon, Ana-Maria Cretu, Gabriel Martins Gomes Nascimento, Gilles Comeau, Vincent D'Aoust, Marc-Antoine Charpentier

Effects of Haptic Data Compression on User Performance in Collaborative Haptic Virtual Environment

Loi Huynh, Mehrdad H Zadeh

SODHO: Service Oriented Development of Haptics Ontology

Hikmat Adhami, Abdulmotaleb El Saddik

3:25 – 3:40 Coffee Break

3:40 – 4:55 Paper Session 6: Texture, Image and Video

A Haptic Texture Database for Tool-mediated Texture Recognition and Classification

Matti Strese, Jun-Yong Lee, Clemens Schuwerk, Qingfu Han, Hyoung-Gook Kim, Eckehard Steinbach

Efficient Spherical High Dynamic Range Imaging for Image-Based Virtual Environments

Fanping Zhou, Jochen Lang

Priority-Concerned chroma-keying

Chengcheng Hao, Wenyi Wang, Jiying Zhao