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 Larivièr, 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 environnements: 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


**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