**Emerging Technologies Talk**

**Ballroom G+J (Experience Hall), Level 3**

**Wednesday 07 December 2016**

13:00 – 13:15

**Emerging Technologies Talk Welcome and Introduction - Including an overview of review process and results**

- Yuichi Itoh, Emerging Technologies Chair
- Bing-Yu Chen, Emerging Technologies Co-Chair

13:15 – 14:15

**Emerging Technologies Talk 1: Haptics**

**Session Chair:** Kouta Minamizawa, Keio University

- **EV-Pen: An Electrovibration Haptic Feedback Pen for Touchscreens**
  - Qinglong Wang, Kochi University of Technology, Jilin University
  - Xiangshi Ren, Kochi University of Technology
  - Xiaoying Sun, Jilin University

- **Bottomless Joystick**
  - Yuichiro Katsumoto, National University of Singapore

- **Cross-Field Haptics: Tactile Device Combined with Magnetic and Electrostatic Fields for Push-Pull Haptics**
  - Satoshi Hashizume, University of Tsukuba
  - Kazuki Takazawa, University of Tsukuba
  - Amy Koike, University of Tsukuba
  - Yoichi Ochiai, University of Tsukuba

14:25 – 15:45

**Emerging Technologies Talk 2: Robotics**

**Session Chair:** Takuji Narumi, The University of Tokyo

- **Phygital Field: an Integrated Field with a Swarm of Physical Robots and Digital Images**
  - Takefumi Hiraki, The University of Tokyo
  - Shogo Fukushima, The University of Tokyo
  - Takeshi Naemura, The University of Tokyo

- **Coded Skeleton: Programmable Deformation Behaviour for Shape Changing Interfaces**
  - Miyu Iwafune, Shibaura Institute of Technology
  - Ohshima Taisuke, The University of Tokyo
  - Ochiai Yoichi, University of Tsukuba

- **HapticAid: Wearable Haptic Augmentation System for Enhanced, Enchanted and Empathised Haptic Experiences**
  - Tomosuke Maeda, Keio University Graduate School of Media Design
  - Roshan Peiris, Keio University Graduate School of Media Design
  - Masashi Nakatani, Keio University Graduate School of Media Design
Yoshihiro Tanaka, Nagoya Institute of Technology / JST, PRESTO
Kouta Minamizawa, Keio University Graduate School of Media Design

- **Stylus Assistant: Designing Dynamic Constraints for Facilitating Stylus Inputs on Portable Displays**
  - Long-Fei Lin, National Taiwan University
  - Shan-Yuan Teng, National Taiwan University
  - Rong-Hao Liang, National Taiwan University
  - Bing-Yu Chen, National Taiwan University

**Thursday, 08 December 2016**

**13:00 – 14:20**

**Emerging Technologies Talk 3: Displays**
**Session Chair:** Toshikazu Ohshima, Ritsumeikan University

- **Gushed Light Field: Design Method for Aerosol-based Fog Display**
  - Ippei Suzuki, University of Tsukuba School of Informatics
  - Shuntarou Yoshimitsu, Waseda University
  - Keisuke Kawahara, University of Tsukuba
  - Nobutaka Ito, The University of Tokyo
  - Atsushi Shinoda, University of Tsukuba
  - Akira Ishii, University of Tsukuba
  - Takatoshi Yoshida, The University of Tokyo
  - Yoichi Ochiai, University of Tsukuba

- **SkyAnchor: No Latency Anchoring of Mid-air Images onto Real Objects**
  - Hajime Kajita, The University of Tokyo
  - Naoya Koizumi, The University of Electro-Communications
  - Takeshi Naemura, The University of Tokyo

- **Towards VR and AR: 360° Light Field Display with Mid-air Interaction**
  - Yifan Peng, The University Of British Columbia
  - Chen Su, Zhejiang University
  - Qing Zhong, Zhejiang University
  - Rui Wang, Zhejiang University
  - Haifeng Li, Zhejiang University
  - Xu Liu, Zhejiang University
  - Wolfgang Heidrich, King Abdullah University Of Science And Technology (KAUST)

- **Reality Forge: Interactive Dynamic Multi-Projection Mapping**
  - Christian Siegl, Computer Graphics Group, University of Erlangen Nuremberg
  - Matteo Colaianni, Computer Graphics Group, University of Erlangen Nuremberg
  - Vanessa Lange, Computer Graphics Group, University of Erlangen Nuremberg
  - Marc Stamminger, Computer Graphics Group, University of Erlangen Nuremberg
  - Frank Bauer, Computer Graphics Group, University of Erlangen Nuremberg
Emerging Technologies Talk 4: VR/AR

Session Chair: Ryoko Ueoka, Kyushu University

- **Coded Facial Expression**
  - Toshiyuki Amano, Wakayama University

- **Emotion Hacking VR (EH-VR): Amplifying Scary VR Experience by Accelerating Real Heart Rate Using False Vibrotactile Biofeedback**
  - Ryoko Ueoka, Kyushu University
  - Ali AlMutawa, Kyushu University
  - Hikaru Katsuki, Kyushu University

- **VibroPlay: Authoring Three-Dimensional Spatial-Temporal Tactile Effects with Direct Manipulation**
  - Da-Yuan Huang, National Taiwan University
  - Liwei Chan, Keio University
  - Xiao-Feng Jian, National Taiwan University
  - Chiun-yao Chang, National Taiwan University
  - Mu-Hsuan Chen, National Taiwan University
  - De-Nian Yang, Academia Sinica
  - Yi-ping Hung, National Taiwan University
  - Bing-Yu Chen, National Taiwan University

- **Pinscreen: 3D Avatar from a Single Image**
  - Hao Li, Pinscreen
  - Shunsuke Saito, Pinscreen
  - Jens Fursund, Pinscreen
  - Lingyu Wei, Pinscreen
  - Liwen Hu, Pinscreen
  - Chao Yang, Pinscreen
  - Ronald Yu, Pinscreen
  - Kyle Olszewski, Pinscreen
  - Stephen Chen, Pinscreen
  - Isabella Benavente, Pinscreen
  - Yen-Chun Chen, Pinscreen

Emerging Technologies Prize Ceremony

- Yuichi Itoh, Emerging Technologies Chair
- Bing-Yu Chen, Emerging Technologies Co-Chair