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Tentative Program

8:00 *Registration, Speaker Check-in and Poster Setup*

8:15 *Welcome & Opening Remarks*

Chair: Cristian A. Linte

8:20 *Keynote Address: Dr. Guang-Zhong Yang, Imperial College London*

Chair: Cristian A. Linte

9:10 *Oral Session I (2 papers + Discussion): Endoscopic Imaging & Applications*

Chair: Purang Abolmaesumi

1 Visual Odometry in Stereo Endoscopy by using PEaRL to handle Partial Scene Deformation

2 A Simple and Accurate Camera-sensor Calibration for Surgical Endoscopes and Microscopes

10:00 *Coffee Break*

10:30 *Oral Session II (3 papers + Discussion): Applications in Augmented Reality*

Chair: Pascal Fallavollita

1 Augmented Reality in Neurovascular Surgery: First Experiences

2 Augmented-reality environment for locomotor training in children with neurological injuries

3 Augmented Reality-Enhanced Endoscopic Images for Annuloplasty Ring Sizing

11:50 *Poster teasers*

12:00 *Lunch*

13:00 *Keynote Address: Dr. Craig Peters, Children's National Health System*

Chair: Ziv Yaniv

13:50 *Poster Session*

1 Graphics Processor Unit (GPU) Accelerated Shallow Transparent Layer Detection in Optical Coherence Tomographic (OCT) images for real-time Corneal Surgical Guidance

2 Simulation of Ultrasound Images for Validation of MR to Ultrasound Registration in Neurosurgery

3 Fusion of Inertial Sensing to Compensate for Partial Occlusions in Optical Tracking Systems

4 Improvement of a Virtual Pivot for Minimally Invasive Surgery Simulators using Haptic Augmentation

5 A New Cost-Effective Approach to Pedicular Screw Placement

6 Linear Object Registration of Interventional Tools

7 A Framework for Semi-Automatic Fiducial Localization in Volumetric Images

15:00 *Coffee Break*

15:30 *Oral Session III (3 papers + Discussion): Ultrasound Imaging and Guidance Applications*

Chair: David R. Holmes III

1 Instrument Tracking and Visualization for Ultrasound Catheter Guided Procedures

2 Towards video guidance for ultrasound, using a prior high-resolution 3D surface map of the external anatomy

3 Ultrasound Image Overlay onto Endoscopic Image by Fusing 2D-3D Tracking of Laparoscopic Ultrasound Probe

16:50 *Awards & Closing Remarks*

Chair: Ziv Yaniv