Thursday 28th July 2022

8:30 – 15:00 Registration Desk Opens

9:00 – 10:00 **Oral Session 4: Image Segmentation**
(Chair: Rihuan Ke, University of Bristol)

9:00 - 9:20 Ultrasonography Uterus and Fetus Segmentation with Constrained Spatial-Temporal Memory FCN. Kong, Bin; Wang, Xin; Wang, Xin; Yang, Haoyu; Cao, Kunlin; Song, Qi; Yin, Youbing

9:20 - 9:40 Fitting Segmentation Networks on Varying Image Resolutions using Splatting Brudfors, Mikael; Balbastre, Yaël; Ashburner, John; Rees, Geraint; Nachev, Parashkev; Ourselin, Sebastien; Cardoso, Jorge

9:40 - 10:00 A Novel Framework for Coarse-Grained Semantic Segmentation of Whole-Slide Images. Bashir, Saad; Raza, Shan; Shaban, Muhammad; Khurram, Ali; Rajpoot, Nasir

10:00 –10:15 Coffee Break & Industrial Booth Exhibition

10:15 – 11:10 **Oral Session 5: Generative Adversarial Network, Transformer and New Models**
(Chair: Emma Wang, University of Cambridge)

10:15 - 10:35 A Deep Generative Model of Neonatal Cortical Surface Development. Fawaz, Abdulah; Robinson, Emma C; Williams, Logan ZJ; Edwards, A. David

10:35 - 10:55 Polyp2Seg: Improved Polyp Segmentation with Vision Transformer. Mandujano Cornejo, Vittorino; Montoya, Javier

10:55 - 11:15 From astronomy to histology: adapting the FellWalker algorithm to deep nuclear instance segmentation. Yeung, Michael; Watts, Todd; Yang, Guang

11:10 – 12:10 **Keynote Prof. Alejandro Frangi (University of Leeds)**
(Chair: Guang Yang, Imperial College London)

12:10 – 12:25 Flash Podium Talk Microsoft

12:25 – 13:00 Lunch & Industrial Booth Exhibition

13:00 – 14:10 **Abstract Submissions: Poster Session**
(Chair: Mike Roberts, University of Cambridge)

—2D-3D motion registration of rigid objects within a soft tissue structure

—Hyperspectral Imaging Approach for Instrument Detection in Gastrointestinal Tract

—A Trio-Method for Retinal Vessel Segmentation using Image Processing

—Feature analysis and extraction for post aphasia expected recovery prediction

—Understanding Systematically: Rich Media Analysis Using Arithmetic and Chinese as Examples

— Low-dose CT image reconstruction with mixed gauss and poisson noise

— Lung Cancer Detection by Using Optimal Threshold Technique and Image Processing