Oral Presentation Session
09:30 – 17:30, Thursday, 19 November 2015

08:30 --- 09:30 Registration

Opening Introduction & Keynote Speech
Reporting Hall 1

09:30 --- 09:50 Chair’s welcome and opening
Prof. Qingming LUO, Huazhong University of Science and Technology, China

09:50 --- 10:10 Keynote: Prof. Christopher James, University of Warwick, UK

10:10 --- 10:30 Keynote: Prof. Zuhong LU, Peking University, China

10:30 --- 10:50 Keynote: Prof. Xin TIAN, Tianjin Medical University, China

10:50 --- 11:10 Keynote: Prof. Shouyan WANG, Suzhou Institute of Biomedical Engineering and Technology, China

11:10 --- 11:30 Keynote: Dr. Cristian A. Linte, Rochester Institute of Technology, USA
Topic: Seeing what lies beneath: Enabling minimally invasive access, visualization and surgical navigation via biomedical imaging and modelling

Session A: Biomedical Imaging & Image Processing
Reporting Hall 1

Chair: Jian YANG, Beijing Institute of Technology, China

11:30 --- 11:45 A1 (0010)
A Lung 3D Model Reconstruction Method Based on Compressed Sensing and MRI
Sa Xiao, Zhicheng Lv, Xin Zhou

11:45 --- 12:00 A2 (0011)
A Novel Fuzzy Enhancement of Mammograms
He Deng, Caohui Duan, Xin Zhou

12:00 --- 12:15 A3 (0017)
Automatic region of interest determination method in dual energy x-ray absorptiometry of the femur and spine
Byambasuren Bat-Erdene, Dong-Han Kim, Seung-Moo Han, Oyun-Erdene Mandakh, Yura Jargalbaatar
12:15 --- 12:30  A4 (0023)  
A novel computational CT image analysis method for classifying nodule from normal thyroid tissue  
W X Peng, C B Liu, S R Xia, Y H Chen, F N Xie

12:30 --- 13:30  Poster Session and Lunch

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**Session A: [continue] Biomedical Imaging & Image Processing**

Reporting Hall 1

13:30 --- 13:45  A5 (0035)  
Co-registration of diffusion tensor imaging and micro-optical imaging based on ANTS  
Hong Ni, Miao Ren, Qiuyuan Zhong, Hui Gong, Qingming Luo, Shangbin Chen

13:45 --- 14:00  A6 (0043)  
Iterative reconstruction for bioluminescence tomography based on an adaptive region shrinking strategy  
Hongbo Guo, Xiaowei He, Jingjing Yu, Yuqing Hou, Shuling Zhang, Fang Dong, Chen Jin

14:00 --- 14:15  A7 (0051) A robust color image watermark scheme using kinoform  
Guanglin Yang, Chaoya Zhao, Haiyan Xie

14:15 --- 14:30  A8 (0055)  
Identifying intrinsic connectivity network pattern during propofol-induced loss of consciousness: a multivariate analysis  
Huandong Li, Xiaoyuan Liu, Nanfeng Jie, Maohu Zhu, Tianzi Jiang

14:30 --- 14:45  A9 (0061)  
A new method of vessel centerline extraction from 3D CT coronary angiography based on open-snake  
D Zhang, C Wang, S Zhou

14:45 --- 15:00  A10 (0065)  
Metrology applications of quantitative evaluation methods in CT phantom images  
P Zhang, G Wang, Q Huang, W Liu

15:00 --- 15:30  Poster Session and Refreshment

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15:30 --- 15:45  A11 (0076)  
A Novel Image Representation Method for Liver Tumor Classification  
Zeyu Wang, Jian Yang, Yongchang Zheng, Danni Ai, Yongtian Wang

15:45 --- 16:00  A12 (0078)  
Correction of the DDRV in Fan-beam SPECT Reconstruction  
Lulu Xie, Bingjie Zhao, Cuixia Feng, Congcong Feng, Junhai Wen

16:00 --- 16:15  A13 (0092)  
Performance Analysis of De Noising Filters for MR Images  
Kalyani Joshi, Shraddha Oza
### Session A: Biomedical Signal Processing

#### A14 (0094)
A new approach of point cloud processing and scene segmentation for guiding the visually impaired  
K Yang, K Wang, R Cheng, X Zhu

#### A15 (0095)
Segmenting multiple overlapping Nuclei in H&E Stained Breast Cancer Histopathology Images based on an improved watershed  
Pengfei Shen, Wenjian Qin, Jie Yang, Wanming Hu, Shifu Chen, Ling Li, Tiexiang Wen, Jia Gu

#### A16 (0096)
Magnetic resonance image reconstruction via L0-normal minimization  
Hao Chen, Jinxu Tao, Yuli Sun, Bensheng Qiu, Zhongfu Ye

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### Session B: Biomedical Signal Processing

**Reporting Hall 2**

#### B1 (0038)
The influence of medication on the oscillatory and dynamic characteristics of subthalamic local field potentials in Parkinson’s disease  
Yanan Wang, Xinyi Geng, Yongzhi Huang, Shouyan Wang

#### B2 (0056)
SpO2 and Heart Rate Measurement with Wearable Watch Based on PPG  
Dong Yang, Jin Zhu, Peng Zhu

#### B3 (0059)
A Novel Motion and Noise Artifacts Reduction Mechanism (MNARM) for Wearable PPG-based Heart Rate Extraction  
Hong Zhang, Yongmei Sun, Junjian Lan, Yishan Lu, Yuefeng Ji

#### B4 (0063)
Time-frequency Distribution of Different ECG Signals  
Xin SU, Shi-jie REN, Zhan XU, Xiang-yuan BU

#### B5 (0070)
SVM-RBF Model Selection for Detection of NS1 Molecule from Raman Spectra of Salivary Mixture  
Afaf Rozan Mohd Radzol, Yoot Khuan Lee, Wahidah Mansor, Noor Hidayah Ros Azamin

#### B6 (0079)
Reduction of Motion Artifacts in Oscillometric Arterial Blood Pressure Measurement  
Bodhisattya Sarkar, Uttam M. Chaskar

#### B7 (0082)
Extraction Of Respiration Rate and Pulse Rate from PPG Signal  
Anuja Agharkar, Uttam Chaskar

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15:00 --- 15:30 **Poster Session and Refreshment**
### Session C: Medical Diagnostics and Biomarkers
**Reporting Hall 2**

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<tr>
<th>Time</th>
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<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>15:45 - 16:00</td>
<td>C1 (0091)</td>
<td>Imaging characteristics of acoustic radiation force impulse electrography for thyroid nodules</td>
<td>T Li, M Y Ding, P Zhou, Y W Mi, Y Y Li</td>
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<td>16:00 - 16:15</td>
<td>C2 (0066)</td>
<td>Damage to the dorsal attention network and interactions with the control and sensory-motor network in late-onset depression</td>
<td>Rui Liu, Yingying Yue, Zhenghua Hou, Jian Lu, Yonggui Yuan, Qiao Wang</td>
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<tr>
<td>16:15 - 16:30</td>
<td>C3 (0068)</td>
<td>HEP-2 cells classification via novel object graph based feature and random forest</td>
<td>Jingxin Liu, Linlin Shen, Guoping Qiu, Jie Shu</td>
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### Session D: Cardiovascular & Respiratory Systems Engineering
**Reporting Hall 2**

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<tr>
<td>16:30 - 16:45</td>
<td>D1 (0064)</td>
<td>Development of Ventilator Tester Calibration Equipment</td>
<td>P Zhang, J Sun, G Wan, W Liu</td>
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### Session E: Neural Engineering & Rehabilitation Engineering
**Reporting Hall 2**

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<tr>
<td>16:45 - 17:00</td>
<td>E1 (0045)</td>
<td>Investigation of Tibialis Anterior Muscle Activation Patterns during Walking on Different Terrains</td>
<td>Hui Zhou, Yingying Wang, Mingxing Zhou, Hui Wang, Guanglin Li</td>
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### Session F: Bioinformatics & Computational Biology, Systems Biology & Modelling Methodologies
**Reporting Hall 2**

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<tr>
<td>17:00 - 17:15</td>
<td>F1 (0085)</td>
<td>A Novel LASSO-Based Feature Weighting Selection Method for Microarray Data Classification</td>
<td>Xiao Li, Beiji Zou, Lei Wang, Min Zeng, Kejuan Yue, Faran Wei</td>
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