2015 IET International Conference on Biomedical Image and Signal Processing

ICBISP 2015
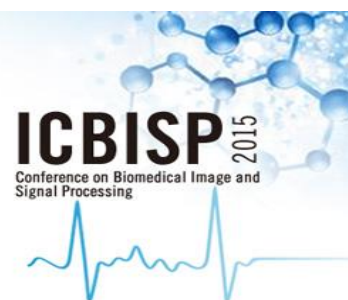Conference on Biomedical Image and Signal Processing

Oral Presentation Session
09:00 – 17:00, Thursday, 19 November 2015

08:30 --- 12:00   **Registration**

Opening Introduction & Keynote Speech
Multi-Functional Hall

09:00 --- 09:15   **BIT representative welcome speech & introduction**
Prof. Yongtian Wang, Beijing Institute of Technology (BIT), China

09:15 --- 09:30   **IET representative welcome speech**
Ian Mercer, Head of International Operations

09:30 --- 09:50   **Chair's address and keynote speech**
Prof. Qingming LUO, Huazhong University of Science and Technology, China
Topic: Image Processing Challenges in Visible Brain-wide Networks

09:50 --- 10:10   **Prof. Christopher James, University of Warwick, UK**
Topic: Smart Watch technology for monitoring behaviour through activity

10:10 --- 10:30   **Prof. Zuhong LU, Peking University, China**
Topic: The opportunities and challenges for the 3rd generation technology of DNA Sequencing.

10:30 --- 11:00   **Poster Session and Refreshment**

11:00 --- 11:20   **Prof. Xin TIAN, Tianjin Medical University, China**
Topic: Neural Signal Transfer in Networked Brain during Working Memory

11:20 --- 11:40   **Prof. Shouyan WANG, Suzhou Institute of Biomedical Engineering and Technology, China**
Topic: The opportunities and challenges in deep brain stimulation

11:40 --- 12:00   **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

12:00 --- 12:20   **Prof. Yalin Zheng, University of Liverpool, UK**
Topic: OCT: Past, current and future developments

12:20 --- 13:30   Lunch and Poster Session

Session A: Biomedical Imaging & Image Processing	
Multi-Functional Hall	

Session Chair: Jian YANG, Beijing Institute of Technology, China

13:30 --- 13:45   **A1 (0010)**
A Lung 3D Model Reconstruction Method Based on Compressed Sensing and MRI
Sa Xiao, Zhicheng Lv, Xin Zhou

13:45 --- 14:00   **A2 (0011)**
A Novel Fuzzy Enhancement of Mammograms
He Deng, Caohui Duan, Xin Zhou

14:00 --- 14:15   **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

14:15 --- 14:30   **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

14:30 --- 14:45   **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

14:45 --- 15:00   **A7 (0051) A robust color image watermark scheme using kinoform**
Guanglin Yang, Chaoya Zhao, Haiyan Xie

15:00 --- 15:15   **A9 (0061)**
A new method of vessel centerline extraction from 3D CT coronary angiography based on open-snake
D Zhang, C Wang, S Zhou

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

15:30 --- 16:00   **Poster Session and Refreshment**

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

16:15 --- 16:30   **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

16:30 --- 16:45	**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
16:45 --- 17:00	**A16 (0096)**
	Magnetic resonance image reconstruction via L0-normal minimization
	Hao Chen, Jinxu Tao, Yuli Sun, Bensheng Qiu, Zhongfu Ye

Session B: Biomedical Signal Processing
Conference Room 2

Session Chair: Professor Christopher James, University of Warwick, UK

13:30 --- 13:45	**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
13:45 --- 14:00	**B2 (0056)**
	SpO2 and Heart Rate Measurement with Wearable Watch Based on PPG
	Dong Yang, Jin Zhu, Peng Zhu
14:00 --- 14:15	**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
14:15 --- 14:30	**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

Session E: Neural Engineering & Rehabilitation Engineering
Conference Room 2

14:30 --- 14:45	**E1 (0045)**
	Investigation of Tibialis Anterior Muscle Activation Patterns during Walking on Different Terrains
	Hui Zhou, Yingying Wang, Mingxing Zhou, Hui Wang, Guanglin Li

Session C: Medical Diagnostics and Biomarkers
Conference Room 2

14:45 --- 15:00	**C2 (0066)**
	Damage to the dorsal attention network and interactions with the control and sensory-motor network in late-onset depression
	Rui Liu, Yingying Yue, Zhenghua Hou, Jian Lu, Yonggui Yuan, Qiao Wang
15:00 --- 15:15	**C3 (0068)**
	HEp-2 cells classification via novel object graph based feature and random forest
	Jingxin Liu, Linlin Shen, Guoping Qiu, Jie Shu

<table>
<tr><td colspan="2">Session F: Bioinformatics & Computational Biology,
Systems Biology & Modelling Methodologies
Conference Room 2</td></tr>
<tr><td>15:15 --- 15:30</td><td>F1 (0085)
A Novel LASSO-Based Feature Weighting Selection Method for Microarray Data Classification
Xiao Li, Beiji Zou, Lei Wang, Min Zeng, Kejuan Yue, Faran Wei</td></tr>
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End of Sessions in Conference Room 2

15:30 --- 16:00   **Poster Session and Refreshment**