# Table of Contents

Welcome Message from the Chairman ................................................................. 2
IEEE IST 2017 Organizers .................................................................................. 3
International School of Imaging: Lecture Series ................................................. 7
Tuesday, October 17 ............................................................................................ 8
Wednesday, October 18 ...................................................................................... 8
Thursday, October 19 ......................................................................................... 15
Friday, October 20 .............................................................................................. 31
Welcome Message from the Chairman

On behalf of the Technical and Local Committee of the 2017 IEEE International Conference on Imaging Systems and Techniques (IST 2017) and IEEE International School on Imaging, I welcome you to Beijing, China.

This year, scientists and engineers from all over the world meet to explore the design principles, development and applications of new imaging technologies, image analysis and processing methodologies, computer vision systems, clinical diagnostic devices, and material inspection and monitoring measurements, systems, and techniques.

In a rapidly changing global economy, experiencing an unparalleled integration of science and technology towards the development of efficient, high-resolution, high-specificity imaging technologies: let us see this event as unique opportunity not only to exchange and disseminate knowledge but also bridge multidisciplinary areas like engineering with health science leading to the creation of new knowledge, and establish global collaborative multidisciplinary opportunities by tightening collaborations among industry, academia, and healthcare industry.

Historically, this is the thirteenth consecutive year, following the successful IST events held previously in Stresa, Italy, Niagara Falls, Canada, Minori, Italy, Krakow, Poland, Chania, Greece, Shenzhen, China, Thessaloniki, Greece, Penang Island, Malaysia, Manchester, UK, Beijing, China, Santorini, Greece, Macau, China, Chania, Greece, where experts from all over the world meet to trigger an in-depth discussion of imaging methodologies and its applications shaping the future, and identifying emerging imaging trends.

I would like to thank the organizers of the Conference and distinguished colleagues, Professor Lijun Xu, Dean of the School of Instrument Science and Opto-Electronic Engineering, Beihang University, China, Professor Lihui Peng, Tsinghua University, China, Professor Wuqiang Yang, University of Manchester, UK, Professor Zhang Cao, Beihang University, China, Professor Yixin Ma, Shanghai Jiao Tong University, China, Professor Na Ying, Hangzhou Dianzi University, China as well as the IST Technical and Steering Committee, and the Technical Committee TC-19 on Imaging Systems and Techniques, for the outstanding organization of the event; Professor Zervakis for his always enthusiastic support of the IST; all the young but promising engineers, specially, Konstantina Kottari, University of Central Greece, Greece, Suman Shrestha, Manhattan College, USA, George Livanos, Technical University of Crete, Greece, and Michael Surovich, Manhattan College, USA, for their significant contributions towards the dissemination of this event worldwide and promotion of quality and standards. Special thanks are extended to Brianna Orr and Chris Dyer, Conference Catalysts, LLC, Administrators of the IST and the School of Imaging for their outstanding and dedicated efforts to successfully administrate these two major events. Many thanks go to the dedicated reviewers which did an excellent job to preserve quality and promote academic excellence.

I hope you enjoy your stay in Beijing, China, and find the 2017 IEEE International Conference on Imaging Systems and Techniques (IST2017) and the IEEE International School on Imaging a rewarding opportunity for advancement of knowledge as well as a way to generate unique global collaborative opportunities among industry, academia, and healthcare professionals.

George C. Giakos, Fellow of the IEEE
General Chairman IEEE IST Conference
Director, IEEE International School on Imaging
New York, United States
IEEE IST 2017 Organizers

General and Technical Program Chair
George Giakos, Manhattan College, USA

Honorary Chairs
Jiancheng Fang, Beihang University, China
Wuqiang Yang, University of Manchester, UK
Mihalis Zervakis, Technical University of Crete (TUC), Greece

Local Chair
Lijun Xu, Beihang University, China

Local Co-Chairs
Huijie Zhao, Beihang University, China
Lihui Peng, Tsinghua University, China
Yixin Ma, Shanghai Jiao Tong University, China
Zhang Cao, Beihang University, China
Na Ying, Hangzhou Dianzi University, China

Organising Committee Chairs
Lijing Li, Beihang University, China
Zhang Cao, Beihang University, China

Organising Committee Members
Gang Liu, Beihang University, China
Lihui Peng, Tsinghua University, China
Zheng Qian, Beihang University, China
Ze Liu, Beijing Jiaotong University, China
Gang Li, Tsinghua University, China
Jingjuan Zhang, Beihang University, China
Shuyi He, Beihang University, China
Jie Chen, Beihang University, China
Xiaolu Li, Beihang University, China
Jiangtao Sun, Beihang University, China
Jianguo Ma, Beihang University, China
Dan Zheng, Beihang University, China

Steering Committee
Mohd. Zaid Abdullah, Universiti Sains Malaysia, Malaysia
Sos Agaian, The University of Texas/The University of Texas Health Science Center, USA
S. Agrawal, Delhi Technological (DTU) Formerly Delhi College of Engineering (DCE), India
Angelos Amanatiadis, Democritus University of Thrace (DUTH), Greece
Costas Balas, Technical University of Crete, Greece
James Basilion, Case Western Reserve University, USA
Kostas Berberidis, University of Patras, Greece
Nikolaos Bourbakis, Wright State University, USA
Michele Ceccarelli, University of Sannio, Italy
Amitava Chatterjee, Jadavpur University, India
C. L. Philip Chen, The University of Macau, China
Xiaolan Deng, University of Chicago, USA
Aditi Deshpande, University of Akron, USA
Sotirios Diamantias, Athens Information Technology, Greece
Anna Fabijańska, Lodz University of Technology, Poland
Apostolos Georgopoulos, University of Minnesota, USA
Seid Zaniar Hoseini, University of Akron, USA
Ahmed Hussein, Manhattan College, USA
Steering Committee (Continued)

Dimitris Iakovidis, University of Thessaly, Greece
Nicolas Karakatsanis, University of Geneva, Switzerland
Dimitrios Karras, Technological Educational Institute of Chalkida, Greece
Aggelos Katsaggelos, Northwester University, USA
Edmund Lam, University of Hong Kong, China
Gang Lu, University of Kent, UK
Joe Majeski, Manhattan College, USA
Mehrube Mehrubeoglu, Texas A&M University-Corpus Christi, USA
Dimitris Metaxas, Rutgers University, USA
Jin Montclare, NYU Polytechnic School of Engineering, USA
Sarhan Mussa, Texas A&M University, USA
Konstantina (Nantia) Nikita, National Technical University of Athens (NTUA), Greece
Matteo Pastorino, University of Genoa, Italy
Gang Li, Tsinghua University, China
Richard Picard, ARCON Corporation, USA
Tri Quang, University of Akron, USA
Sergio Saponara, University of Pisa, Italy
Vangelis Sakkalis, FORTH, Greece
Jacob Scharcanski, UFRGS, Brazil
Suman Shrestha, Manhattan College, USA
Mel Siegel, Carnegie Mellon University, USA
Andrzej Skalski, AGH University of Science and Technology, Poland
Cesare Svelto, Polytechnic of Milan, Italy
Steven J. Tilden, Everett Charles Technologies, LTXCredence and Multitest, USA
Ntziachristos Vasilieios, Technical University of Munich, Germany
Yi Wang, Manhattan College, USA
Lijun Xu, Beihang University, China
Wuqiang Yang, University of Manchester, UK
Jiamin Ye, Institute of Engineering Thermophysics, Chinese Academy of Sciences, China
Na Ying, Hangzhou Dianzi University, China
Bing Yu, Marquette University, USA
Bing Yu, The University of Akron, USA
Xin Yu, Case Western Reserve University, USA
Mihalis Zervakis, Technical University of Crete (TUC), Greece
Huiyu Zhou, Queens' University Belfast, Ireland

Technical Program Chairs

Shiva Abbaasazadeh, University of Illinois at Urbana-Champaign, USA
Mohd. Zaid Abdullah, Universiti Sains Malaysia, Malaysia
Sos Agaian, The University of Texas/The University of Texas Health Science Center, USA
Ioannis Andreadis, National Technical University of Athens, Greece
James Basilion, Case Western Reserve University, USA
Amitava Chatterjee, Jadavpur University, India
Antonios Gasteratos, DUTH, Greece
Ahmet Hussein, Manhattan College, USA
Nicolas Karakatsanis, University of Geneva, Switzerland
George Livanos, TUC, Greece
Yixin Ma, Shanghai Jiao Tong University, China
Konstantinos Michmizos, Rutgers University, USA
Konstantina Nikita, National Technical University of Athens (NTUA), Greece
Matteo Pastorino, University of Genoa, Italy
Lihui Peng, Tsinghua University, China
Jacob Scharcanski, UFRGS, Brazil
Suman Shrestha, Manhattan College, USA
Andrzej Skalski, AGH University of Science and Technology, Poland
Cesare Svelto, Polytechnic of Milan, Italy
Keerthi Valluru, Stanford University, USA
Technical Program Chairs (Continued)
Yi Wang, Manhattan College, USA
Lijun Xu, Beihang University, China
Wuqiang Yang, University of Manchester, UK
Bing Yu, Marquette University, USA
Michalis Zervakis, Technical University of Crete, Greece

Technical Coordinators
Angelos Amanatiadis, DUTH, Greece
M.A. Buttar, Manhattan College, USA
Cathryn Callahan, Manhattan College, USA
Tannaz Farrahi, University of Virginia, USA
Dimitris Iakovidis, University of Thessaly, Greece
Kanchan Lata Kashyap, Indian Institute of Information Technology, Design and Manufacturing (IIITDM), India
M.A. Khokhar, Manhattan College, USA
Selina Kolokytha, Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland
Konstantina Kottari, University of Thessaly, Greece
George Livanos, TUC, Greece
Joe Majeski, Manhattan College, USA
Michael Surovich, Manhattan College, USA
Maria Venianaki, IMM School for Advanced Studies Lucca & Foundation for Research and Technology - Hellas (FORTH), Italy & Greece

International Technical Committee
Mohd. Zaid Abdullah, Universiti Sains Malaysia, Malaysia
Mania Alkaterini, Technical University of Crete (TUC), Greece
Angelos Amanatantis, Democritus University of Thrace (DUTH), Greece
Doulamis Anastasios, National Technical University of Athens (NTUA), Greece
Supavadee Aramvith, Chulalongkorn University, Thailand
Antoniadis Aristomenis, Technical University of Crete (TUC), Greece
Kostas Bacharidis, Technical University of Crete (TUC), Greece
Konstantinos Balas, Technical University of Crete (TUC), Greece
Jeff Bamber, Institute of Cancer Research, UK
Panagiotis Bamidis, Aristotle University of Thessaloniki, Greece
Michele Ceccarelli, University of Sannio, Italy
Christo Christodoulou, University of New Mexico, USA
Feng Dong, Tianjin University, China
Themis Exarchos, University of Ioannina, Greece
Dimitrios Fotiadis, University of Ioannina, Greece
Robert Gao, University of Connecticut, USA
Antonios Gasteratos, Democritus University of Thrace (DUTH), Greece
Spyretta Golemati, Medical School of Athens, Greece
Yan Han, North University of China
Zhiyao Huang, Zhejiang University, China
Dimitris Iakovidis, University of Thessaly, Greece
Zacharias Ierotheos, University of Ioannina, Greece
Andreadis Ioannis, National Technical University of Athens (NTUA), Greece
Andreadis Ioannis, Democritus University of Thrace (DUTH), Greece
Zacharakis Ioannis, Foundation for Research and Technology - Hellas (FORTH), Greece
Nicolas Karakatsanis, University of Geneva, Switzerland
Georgia Koukiou, University of Patras, Greece
George Livanos, Technical University of Crete (TUC), Greece
Dimitrios Lymperopoulos, University of Patras, Greece
Konstantia Moirogiorgou, Technical University of Crete (TUC), Greece
Konstantina Nikita, National Technical University of Athens (NTUA), Greece
Nikos Papamarkos, Democritus University of Thrace (DUTH), Greece
International Technical Committee (Continued)
Euripides Petrakis, Technical University of Crete (TUC), Greece
Andreas Savakis, Rochester Institute of Technology, USA
Georgios Sergiadis, Aristotle University of Thessaloniki, Greece
Evi Tripoliti, University of Ioannina, Greece
Gregory Tsagkatakis, Foundation for Research and Technology - Hellas (FORTH), Greece
Sakkalis Vaggelis, Foundation for Research and Technology - Hellas (FORTH), Greece
Anastasopoulos Vasileios, University of Patras, Greece
Ntziachristos Vasileios, Technical University of Munich, Germany
Chuanlong Xu, Southeast University, China
Zhaotian Zhang, NSFC, China
Zhaohui Song, NSFC, China
Shijie Sun, Beihang University, China
Mihalis Zervakis, Technical University of Crete (TUC), Greece

Industrial Relationships/Sponsorships Coordinators
Aditi Deshpande, University of Akron, USA
Zoe Giakos, University of Akron, USA
Na Ying, Hangzhou Dianzi University, China

Conference Management
Conference Catalysts, LLC, USA
International School of Imaging: Lecture Series

Wednesday, October 18

09:30 – 10:10
Lecture 1: Neuromorphic Imaging
Ballroom A
George C. Giakos, Ph.D., Fellow of the IEEE (Manhattan College, New York, USA)

10:10 – 10:50
Lecture 2: Recent development in combustion monitoring via TDLAS Tomography
Ballroom A
Lijun Xu, Ph.D. (Beihang University, Beijing, China)

11:10 – 11:50
Lecture 3: Advanced Methods of Biomedical Image Analysis
Ballroom A
Michalis Zervakis (Technical University of Crete, Greece)

11:50 – 12:30
Lecture 4: Development of key technology and equipment for deep resources geophysical exploration
Ballroom A
Qingyun Di (Institute of Geology & Geophysics, CAS, China)

13:50 – 14:20
Lecture 5: A Decision Tree Approach for Vegetation Classification Using Polarimetric SAR Features
Ballroom A
Wen Hong (Institute of Electronics, CAS, China)

14:20 - 14:50
Lecture 6: Cardiovascular MR Imaging: From Bench to Bedside
Ballroom A
Qi Yang (Xuanwu Hospital, China)

14:50 – 15:20
Lecture 7: Direct image reconstruction and real-time ECT system
Ballroom A
Zhang Cao (Beihang University, China)

15:20 – 15:50
Lecture 8: Object Detection based on Deep Learning
Ballroom A
Na Ying (Hangzhou Dianzi University, China)

15:50 – 16:20
Lecture 9: Electrical tomography imaging and data fusion for oil-gas-water three flow measurement applications
Ballroom A
Yi Li (Tsinghua Shenzhen Graduate School)
## Tuesday, October 17

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00 - 18:00</td>
<td>Registration <em>(Venue: Lobby of Vision Hotel)</em></td>
</tr>
<tr>
<td>18:30 - 21:00</td>
<td>Reception Dinner <em>(Venue: Beihang Training Center Restaurant)</em></td>
</tr>
</tbody>
</table>

## Wednesday, October 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00 - 08:45</td>
<td>Registration <em>(Venue: Beihang New Main Building Conference Center)</em></td>
</tr>
<tr>
<td>09:00 – 09:10</td>
<td>Welcome Message from the Vice President of Beihang University</td>
</tr>
<tr>
<td></td>
<td>Haijun Huang, Vice President of Beihang University, China</td>
</tr>
<tr>
<td></td>
<td>Room: Ballroom A</td>
</tr>
<tr>
<td>09:10 – 09:20</td>
<td>Welcome Message from the Local Chair</td>
</tr>
<tr>
<td></td>
<td>Lijun Xu, Ph.D., Dean of School of Instrument Science and Opto-electronic Engineering, Beihang University, China</td>
</tr>
<tr>
<td></td>
<td>Room: Ballroom A</td>
</tr>
<tr>
<td>09:20 – 09:30</td>
<td>Welcome Message from the General Chair</td>
</tr>
<tr>
<td></td>
<td>George C. Giakos, Ph.D., Fellow of the IEEE</td>
</tr>
<tr>
<td></td>
<td>Room: Ballroom A</td>
</tr>
<tr>
<td>09:30 – 10:10</td>
<td>Lecture 1: Neuromorphic Imaging</td>
</tr>
<tr>
<td></td>
<td>George C. Giakos, Ph.D., Fellow of the IEEE (Manhattan College, New York, USA)</td>
</tr>
<tr>
<td></td>
<td>Room: Ballroom A</td>
</tr>
<tr>
<td>10:10 – 10:50</td>
<td>Lecture 2: Recent development in combustion monitoring via TDLAS Tomography</td>
</tr>
<tr>
<td></td>
<td>Lijun Xu, Ph.D. (Beihang University, Beijing, China)</td>
</tr>
<tr>
<td>10:50 – 11:00</td>
<td>Photograph <em>(Main Entrance of New Main Building, Beihang University)</em></td>
</tr>
<tr>
<td>11:00 – 11:10</td>
<td>Coffee/Tea Break</td>
</tr>
<tr>
<td>11:10 – 11:50</td>
<td>Lecture 3: Advanced Methods of Biomedical Image Analysis</td>
</tr>
<tr>
<td></td>
<td>Michalis Zervakis (Technical University of Crete, Greece)</td>
</tr>
<tr>
<td>11:50 – 12:30</td>
<td>Lecture 4: Development of key technology and equipment for deep resources geophysical exploration</td>
</tr>
<tr>
<td></td>
<td>Qingyun Di (Institute of Geology &amp; Geophysics, CAS, China)</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>12:30 – 13:50</td>
<td>Lunch (Beihang Training Center Restaurant)</td>
</tr>
</tbody>
</table>
| 13:50 – 14:20| Lecture 5: A Decision Tree Approach for Vegetation Classification Using Polarimetric SAR Features  
Wen Hong (Institute of Electronics, CAS, China) |
| 14:20 - 14:50| Lecture 6: Cardiovascular MR Imaging: From Bench to Bedside  
Qi Yang (Xuanwu Hospital, China) |
| 14:50 – 15:20| Lecture 7: Direct image reconstruction and real-time ECT system  
Zhang Cao (Beihang University, China) |
| 15:20 – 15:50| Lecture 8: Object Detection based on Deep Learning  
Na Ying (Hangzhou Dianzi University, China) |
| 15:50 – 16:20| Lecture 9: Electrical tomography imaging and data fusion for oil-gas-water three flow measurement applications  
Yi Li (Tsinghua Shenzhen Graduate School) |
| 16:20 – 16:30| Coffee/Tea Break                                                     |

**Imaging Sensors and Detectors I**  
**Meeting Room 2**  
**Chair:** Lihui Peng (Tsinghua University, P.R. China)  
Xingyu, Xie (Khalifa University of Science and Technology, United Arab Emirates)  
| 16:30 | Dynamic Segmentation using a Novel Neuromorphic Polarimetric Imaging System  
Michael Surovich (Manhattan College, USA)  
Suman Shrestha (Manhattan College, USA)  
George C Giakos (Manhattan College, USA)  
Nicolas Douard (Manhattan College, USA)  
Zoe Giakos (University of Akron, USA) |
Wednesday, October 18

16:45  **Surface Defects Mapping Using Microwaves and Ultrasonic Phased Array Imaging**
Abdallah Yassin (Khalifa University of Science and Technology & Petroleum Institute, United Arab Emirates)
Mohamed A Abou-Khousa (Khalifa University of Science and Technology & Petroleum Institute, United Arab Emirates)
Mohammad Ramzi (Khalifa University of Science and Technology & Petroleum Institute, United Arab Emirates)

17:00  **Demosaicking based on dual-CFA pattern**
Xiangdong Chen (Nanjing University of Posts and Telecommunications, P.R. China)
Haoran Wu (Nanjing University of Posts and Telecommunications, P.R. China)
Bo Yang (Nanjing University of Posts and Telecommunications, P.R. China)
Gwanggil Jeon (Incheon National University, Korea)

17:15  **Research on CCERT Under Two Different Excitation Patterns**
Yandan Jiang (Zhejiang University, P.R. China)
Zhen Xu (Zhejiang University, P.R. China)
Baoliang Wang (Zhejiang University, P.R. China)
Zhiyao Huang (Zhejiang University, P.R. China)
Haifeng Ji (Zhejiang University, P.R. China)
Haiqing Li (Zhejiang University, P.R. China)

16:30 - 17:30  **Image Analysis and Image Quality Assessment**
**Meeting Room 3**
**Chair:** Naim Dahnoun (University of Bristol, United Kingdom (Great Britain)), Ze Liu (Beijing Jiaotong University, P.R. China)

16:30  **AVRDB: Annotated Dataset for Vessel Segmentation and Calculation of Arteriovenous Ratio**
Shahzad Akbar (COMSATS Institute of Information Technology, Wah, Pakistan)
Taimur Hassan (CASE - University of Engineering & Technology, Pakistan)
Muhammad Usman Akram (CEME NUST, Pakistan)
Ubaid Yasin and Imran Basit (Armed Forces Institute of Ophthalmology, Pakistan)

16:45  **A Pen Locating Scheme for large-size electronic whiteboards**
Wenjie Zhou (Peking University, P.R. China)
Xiaohui Duan (Peking University, P.R. China)

17:00  **Sampling Method for GMM Curve Fitting in Multi Object Tracking**
Rui Wang (Beihang University, P.R. China)
Ran Huang (Beihang University, P.R. China)
Yuan Gao (Beihang University, P.R. China)
Haiyan Sun (Beihang University, P.R. China)
Wednesday, October 18

17:15  Effect of Media Permittivity on Imaging Quality of Electrical Capacitance Tomography
       Shiguo Liang (Institute of Engineering Thermophysics, Chinese Academy of Sciences, P.R. China)
       Jiamin Ye (Institute of Engineering Thermophysics, Chinese Academy of Sciences, P.R. China)
       Haigang Wang (University of Chinese Academy of Sciences, P.R. China)
       Meng Wu (Institute of Engineering Thermophysics, Chinese Academy of Sciences, P.R. China)

16:30 - 17:30  Image Segmentation I
               Meeting Room 8
               Chair: Baoliang Wang (Zhejiang University, P.R. China)

16:30  An EIT Image Segmentation Method Based on Projection Distance Minimization
       Guanghui Liang (Tianjin University, P.R. China)
       Shangjie Ren (Tianjin University, P.R. China)
       Feng Dong (Tianjin University, P.R. China)

16:45  Segmentation of Touching Seeds Based on Shape Feature and Multiple Concave Point Detection
       Lu Gao (Shanghai Jiao Tong University, P.R. China)
       Manhua Liu (Shanghai Jiao Tong University, P.R. China)
       Zhao Chunyu (Shanghai Jiao Tong University, P.R. China)

17:00  A Study of Image Segmentation Algorithms Combined with Different Image Preprocessing Methods for Thyroid Ultrasound Images
       Junying Chen (South China University of Technology, P.R. China)
       Feng Li (South China University of Technology, P.R. China)
       Yixuan Fu (South China University of Technology, P.R. China)
       Qun Liu (South China University of Technology, P.R. China)
       Jiajun Huang (South China University of Technology, P.R. China)
       Kai Li (The Third Affiliated Hospital of Sun Yat-Sen University, P.R. China)

17:15  3D Simultaneous Segmentation and Registration of Vertebral Bodies for Accurate BMD Measurements
       Lisa Boneta (Manhattan College, USA)
       Ahmed Shalaby (University of Louisville, USA)
       Ahmed Refaey (Manhattan College, USA & Western University, Canada)
       Khaled Loukhaoukha (Laval University, Canada)
       George C Giakos (Manhattan College, USA)
**Wednesday, October 18**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:30</td>
<td>Pattern Recognition and Image Enhancement</td>
<td>Jie Chen (Beihang University, P.R. China) Koushlendra Kumar Singh</td>
<td>Qunchong Zhao (Beihang University, P.R. China) Xiaolu Li (Beihang University, P.R. China) Lijun Xu (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>17:30</td>
<td>Land Cover Classification from ICESat/GLAS Waveform Data</td>
<td></td>
<td>Qunchong Zhao (Beihang University, P.R. China) Xiaolu Li (Beihang University, P.R. China) Lijun Xu (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>17:45</td>
<td>Comparison of Two Approaches for Land Cover Classification from ICESat/GLAS Waveform Data</td>
<td></td>
<td>Qunchong Zhao (Beihang University, P.R. China) Xiaolu Li (Beihang University, P.R. China) Lijun Xu (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>18:00</td>
<td>Fractional Order Savitzky-Golay Differentiator based Approach for Mammogram Enhancement</td>
<td>Koushlendra Kumar Singh (PDPM IIITDM Jabalpur, India) Binod Singh (National Institute of Technology, India) Manish Bajpai (IIITDM Jabalpur, India)</td>
<td>Gao Chen (Tsinghua University, P.R. China) Gang Li (Tsinghua University, P.R. China)</td>
</tr>
<tr>
<td>18:15</td>
<td>Joint of Discrete Curvelet Transform and Nonlocal Tensor Sparse Regularization for SAR Image Despeckling</td>
<td>Gao Chen (Tsinghua University, P.R. China) Gang Li (Tsinghua University, P.R. China)</td>
<td>Gao Chen (Tsinghua University, P.R. China) Gang Li (Tsinghua University, P.R. China)</td>
</tr>
<tr>
<td>17:30</td>
<td>MRI, CT, SPECT, PET, ET, and Microscopy</td>
<td>Michalis Zervakis (Technical University of Crete, Greece) Feng Dong (Tianjin University, P.R. China) &amp;</td>
<td>Wenbin Tian (University of Manchester, United Kingdom (Great Britain)) Jiangtao Sun (Beihang University, P.R. China) Mimi Faisyalini Ramli (University of Manchester, United Kingdom (Great Britain)) Wuqiang Yang (The University of Manchester, United Kingdom (Great Britain))</td>
</tr>
<tr>
<td>17:30</td>
<td>Investigation of Relaxation Factor in Landweber Iterative Algorithm for Electrical Capacitance Tomography</td>
<td>Wenbin Tian (University of Manchester, United Kingdom (Great Britain)) Jiangtao Sun (Beihang University, P.R. China) Mimi Faisyalini Ramli (University of Manchester, United Kingdom (Great Britain)) Wuqiang Yang (The University of Manchester, United Kingdom (Great Britain))</td>
<td>Wenbin Tian (University of Manchester, United Kingdom (Great Britain)) Jiangtao Sun (Beihang University, P.R. China) Mimi Faisyalini Ramli (University of Manchester, United Kingdom (Great Britain)) Wuqiang Yang (The University of Manchester, United Kingdom (Great Britain))</td>
</tr>
<tr>
<td>17:45</td>
<td>The GVF measurement and flow regime study of gas-water flows by ERT sensor</td>
<td>Yuchi Deng (Tsinghua University, P.R. China) Yinyin Liu (Tsinghua University, P.R. China) Yi Li (Tsinghua University, P.R. China)</td>
<td>Yuchi Deng (Tsinghua University, P.R. China) Yinyin Liu (Tsinghua University, P.R. China) Yi Li (Tsinghua University, P.R. China)</td>
</tr>
</tbody>
</table>
Wednesday, October 18

18:00  Liver Sub-Pixel Detection Method on Magnetic Resonance Images
Qinghua Su (Beijing Wuzi University, P.R. China)
Yang Xuedong (Guang'anmen Hospital, China Academy of Chinese Medical Sciences, P.R. China)
LI Juntao (Beijing Wuzi University, P.R. China)
Yan Zhao (Beihang University, P.R. China)

18:15  Multiresolution Bioinspired Cross-Polarized Imaging and Biostatistics of Lung Cancer Tissue Samples
Gloria Bauman (Manhattan College, USA)
Suman Shrestha (Manhattan College, USA)
Kiera Mallinson (Manhattan College, USA)
Michael Surovich (Manhattan College, USA)
Yi Wang (Manhattan College, USA)
George Livanos (Technical University of Crete, Greece)
Michalis Zervakis (Technical University of Crete, Greece)
Ying Na (Hangzhou Dianzi University, P.R. China)
George C Giakos (Manhattan College, USA)
Zoe Giakos (University of Akron, USA)

17:30 – 18:45
Deep Learning I
Meeting Room 8
Chair: Junwen Chen (Southwest Jiaotong University, P.R. China)
Ammarah Farooq (College of Electrical and Mechanical Engineering, NUST, Pakistan)

17:30  High-speed Railway Catenary Components Detection Using the Cascaded Convolutional Neural Networks
Junwen Chen (Southwest Jiaotong University, P.R. China)
Zhigang Liu (Southwest Jiaotong University, The Netherlands)
Hongrui Wang (Delft University of Technology, The Netherlands)
Kai Liu (Southwest Jiaotong University, P.R. China)

17:45  A Deep CNN based Multi-class Classification of Alzheimer’s Disease using MRI
Ammarah Farooq (College of Electrical and Mechanical Engineering, NUST, Pakistan)
Syed Muhammad Anwar (University of Engineering and Technology Taxila & Signal, Image, Multimedia Processing and Learning, Pakistan)
Muhammad Awais Rana (Surrey University, United Kingdom (Great Britain))
Saad Rehman (NUST COLLEGE OF EME, Pakistan)

18:00  Combining Convolutional and Recurrent Neural Networks for Alzheimer’S Disease Diagnosis Using PET Images
Danni Cheng (Shanghai Jiao Tong University, P.R. China)
Manhua Liu (Shanghai Jiao Tong University, P.R. China)
### Wednesday, October 18

**18:15** People detection in crowded scenes using hierarchical features  
Qiăng Zeng (Peking University, P.R. China)  
Yule Yuan (Shenzhen Graduate School of Peking University, P.R. China)  
Canmiao Fu (Peking University, P.R. China)  
Yong Zhao (Peking University, P.R. China)

**18:30** Classification of Cataract Fundus Image Based on Deep Learning  
Yanyan Dong (Beijing University of Posts and Telecommunications, P.R. China)  
Qinyan Zhang (Beijing University of Posts and Telecommunications, P.R. China)  
Zhiqiang Qiao (Beijing University of Posts and Telecommunications, P.R. China)  
Ji-Jiang Yang (Tsinghua University, P.R. China)

**19:30 - 22:00**  
Banquet Dinner (Dongfanghong restaurant)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair</th>
<th>Details</th>
</tr>
</thead>
</table>
| 09:00   | **Tomographic Scanners: ECT, Inverse scattering, Industrial Scanners I** | Lihui Peng (Tsinghua University, P.R. China) | **Chair:** Lihui Peng (Tsinghua University, P.R. China) <br> **Jianguo Sun** (Beihang University, P.R. China)  
**09:00** Research on Gas/Solid Two-phase Flow Imaging System Based on ECT Technology  
*Chaoqi Yan* (Civil Aviation University of China, P.R. China)  
*Min Ma* (Civil Aviation University of China, P.R. China)  
**09:15** A Platform for Electrical Capacitance Tomography Large-scale Benchmark Dataset Generating and Image Reconstruction  
*Jin Zheng* (Tsinghua University, P.R. China)  
*Lihui Peng* (Tsinghua University, P.R. China)  
**09:30** Modelling of electrical capacitance array for water leakage imaging inside porous slab  
*Rui Li* (Tsinghua University, P.R. China)  
*Lihui Peng* (Tsinghua University, P.R. China)  
**09:45** Experimental investigation of gas-oil two-phase flow using electrical capacitance tomography  
*Yinyan Liu* (Tsinghua University, P.R. China)  
*Yuchi Deng* (Tsinghua University, P.R. China)  
*Yi Li* (Tsinghua University, P.R. China) |
| 09:00   | **SPECIAL SESSION: Computer Vision: Measurements, Analysis and Processing Techniques I** | Anqi Huang (Hefei University of Technology, P.R. China) | **Chair:** Anqi Huang (Hefei University of Technology, P.R. China) <br> **Yang Cai** (University of Shanghai for Science and Technology, P.R. China)  
**09:00** Dynamic Path Planning Algorithm for Wearable Visual Navigation System Based on the Improved A*  
*Yidou Zhang* (Beihang University, P.R. China)  
*Yan Zhao* (Beihang University, P.R. China)  
*Tong Wei* (Beihang University, P.R. China)  
*Jiemin Chen* (Beihang University, P.R. China)  
**09:15** Automatic Measurement Based on Stereo Vision System Using a Single PTZ Camera  
*Rui Wang* (Beihang University, P.R. China)  
*Suizhou Feng* (Beihang University, P.R. China) |
Thursday, October 19

09:30  Digital Image Correlation Using Ring Template for 3D Reconstruction
Anqi Huang (Hefei University of Technology, P.R. China)
Yonghong Wang (Hefei University of Technology, P.R. China)
Xizuo Dan (Hefei University of Technology, P.R. China)
Yue Hu (Hefei University of Technology, P.R. China)
Siyuan Bao (Hefei University of Technology, P.R. China)

09:45  An Improved Image Processing Method for Particle Measurement
Yang Cai (University of Shanghai for Science and Technology, P.R. China)
Mingxu Su (University of Shanghai for Science and Technology, P.R. China)

09:00 – 10:00
SPECIAL SESSION: Image processing and pattern recognition I
Meeting Room 8
Chair: Fu Feiran (Changchun University of Science and Technology, P.R. China)

09:00  Automated identification of colorectal glands morphology from benign images
Ammara Nasim (Bahria University, Pakistan)
Taimur Hassan (Bahria University, Islamabad, Pakistan)
Muhammad Usman Akram (CEME NUST, Pakistan)
Bilal Hassan (College of EME, NUST, Pakistan)
Muhammad Ali Shami (Bahria University, Islamabad Campus, Pakistan)

09:15  Temporal Difference Method Based on Positive and Negative Energy Distribution in Moving Objects Detection
Fu Feiran (Changchun University of Science and Technology, P.R. China)
Fang Ming (Changchun University of Science and Technology, P.R. China)
Yang Huamin (Changchun University of Science and Technology, P.R. China)

09:30  Subsurface Object Classification of Hyperspectral Imaging: Inversion and Regularization Under Lack of Precise Knowledge and Measurements
Luis O. Jimenez-Rodriguez (University of Puerto Rico Mayaguez Campus, Puerto Rico)
Emmanuel Carpena (University of Puerto Rico Mayaguez Campus)
Emmanuel Arzuaga (University of Puerto Rico Mayaguez, Puerto Rico)
Sujeily Fonseca (University of Puerto Rico Mayaguez Campus, Puerto Rico)
Thursday, October 19

10:00 - 11:00
Tomographic Scanners
Meeting Room 2
Chair: Mohohlo Tsoeu (University of Cape Town, South Africa)
Nan Li (Northwestern Polytechnical University & Beijing University of Technology, China)

10:00  A Modified Conjugate Gradient Reconstruction Algorithm for Electromagnetic Tomography
Xianglong Liu (Beijing Jiaotong University, P.R. China)
Ze Liu (Beijing Jiaotong University, P.R. China)
Sheng Zhu (Beijing Jiaotong University, P.R. China)
Jiawei Wang (Beijing Jiaotong University, P.R. China)

10:15  Simulation study on Ultrasonic Tomography in Bubbly Gas/Liquid Two-phase Flow
Nan Li (Northwestern Polytechnical University & Beijing University of Technology, P.R. China)
Kun Xu (Beijing University of Technology, P.R. China)

10:30  An Improved Normalized Model of Electreted Capacitance Tomography
Lifeng Zhang (Tianjin University, P.R. China)
Feng Zhu (North China Electric Power University, P.R. China)
Qin Zhang (North China Electric Power University, P.R. China)

10:45  Capabilities of Code Division Multiplexed Electrical Impedance Tomography
Mohohlo Tsoeu (University of Cape Town, South Africa)
Michael R Inggs (University Cape Town, South Africa)

10:00 – 11:00
Sensors for Aerospace Applications I
Meeting Room 3
Chair: Yan Zhao (Beihang University, P.R. China)
Manguo Huang (AVIC Beijing Changcheng Aeronautic Measurement and Control Technology Research Institute, P.R. China)

10:00  Globally Optimal Filtering for Systems with Nonideal Measurements, Stochastic Nonlinearities and Correlated Noises
Qunsheng Li (Beihang University, P.R. China)
Yan Zhao (Beihang University, P.R. China)
Yidou Zhang (Beihang University, P.R. China)

10:15  An Optimized Layout Method Based on Genetic Algorithm for DPOS
Xiaolin Gong (Beihang University)
Haojie Liu (Beihang University)
Gang Liu (Beihang University, P.R. China)
Xiaolu Li (Beihang University, P.R. China)
Thursday, October 19

10:30  Design of temperature compensation for silicon-sapphire pressure sensor
Manguo Huang (AVIC Beijing Changcheng Aeronautic Measurement and Control Technology Research Institute, P.R. China)
Liu Defeng (AVIC Beijing Changcheng Aeronautic Measurement and Control Technology Research Institute, P.R. China)
Lu Chao (Beihang University, P.R. China)
Guo Zhanshe (Beihang University, P.R. China)
Li Xin (AVIC Beijing Changcheng Aeronautic Measurement and Control Technology Research Institute, P.R. China)

10:45  Influence of Ray-tracing Step on Aero-Optics Imaging Deviation Computation
Liang Xu (Tianjin University of Technology, P.R. China)
DeTing Xue (Tianjin University of Technology, P.R. China)
XiaoYi Lv (Xinjiang University, P.R. China)

10:00 – 11:00
SPECIAL SESSION: Image processing and pattern recognition II
Meeting Room 8
Chair: Yuanchi Ma (University of Shanghai for Science and Technology, P.R. China)
Rui Fan (University of Bristol, United Kingdom (Great Britain))

10:00  An Adaptive Wavelet Transform Application to Multiple Targets Tracking in the Air
Rui Wang (Beihang University, P.R. China)
Jingwen Xu (Beihang University, P.R. China)
Yan Zhao (Beijing Institute of Remote Sensing Equipment, P.R. China)

10:15  A Depth Estimation Algorithm of Plenoptic Camera for the Measurement of Particles
Yuanchi Ma (University of Shanghai for Science and Technology, P.R. China)
Wu Zhou (University of Shanghai for Science and Technology, P.R. China)
Tianlei Qian (University of Shanghai for Science and Technology, P.R. China)
Xiaoshu Cai (University of Shanghai for Science and Technology, P.R. China)

10:30  Real-Time User Selected Dynamic Template Tracking For UAV
Fabio Mendez (University of Bristol, United Kingdom (Great Britain))
Mark Ferguson (University of Bristol, United Kingdom (Great Britain))
Naim Dahnoun (University of Bristol, United Kingdom (Great Britain))
Scott Tancock (University of Bristol, United Kingdom (Great Britain))

10:45  Real-Time Implementation of Stereo Vision Based on Optimised Normalised Cross-Correlation and Propagated Search Range on a GPU
Rui Fan (University of Bristol, United Kingdom (Great Britain))
Naim Dahnoun (University of Bristol, United Kingdom (Great Britain))

11:00 - 11:20
Coffee/Tea Break
### Embedded Imaging, Mobile and Communication applications and Cybersecurity and Imaging

**Meeting Room 2**

**Chair:** Alavikunhu Panthakkan (University of Dubai, United Arab Emirates)
Falin Wu (Beihang University, P.R. China)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:20</td>
<td>An INS-aided GPS Fast Acquisition Algorithm for High Dynamic Applications</td>
<td>Falin Wu (Beihang University, P.R. China), Shan Xu (Beihang University, P.R. China), Zhendian Wu (BOE, P.R. China), Jiemin Chen (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>11:35</td>
<td>A BeiDou Weak Signal Acquisition Method with INS-aiding</td>
<td>Falin Wu (Beihang University, P.R. China), Shan Xu (Beihang University, P.R. China), Yong Fu (Chinese Academy of Sciences, P.R. China), Jiemin Chen (Beihang University, P.R. China), Tahir Jan (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>11:50</td>
<td>Two-stage Hough Transform Algorithm for Lane Detection System Based on TMS320DM6437</td>
<td>Houqiang Li (University of Science and Technology Beijing, P.R. China), Zhaohui Zhang (University of Science and Technology Beijing, P.R. China), Xiaoyan Zhao (University of Science and Technology Beijing, P.R. China), Mengzhong He (University of Science and Technology Beijing, P.R. China)</td>
</tr>
<tr>
<td>12:05</td>
<td>A New Reversible Watermarking Technique using Turbo Product Code and Adaptive Prediction Algorithm for Satellite Images</td>
<td>Alavikunhu Panthakkan (University of Dubai, United Arab Emirates), Sara Ahmed AlMaenei (Mohammed Bin Rashid Space Center, United Arab Emirates), Hussain Al-Ahmad (University of Dubai, United Arab Emirates)</td>
</tr>
</tbody>
</table>

### Image Reconstruction

**Meeting Room 3**

**Chairs:** Yong Bao (University of Edinburgh, United Kingdom (Great Britain)), Shengheng Liu (University of Edinburgh, United Kingdom (Great Britain))

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:20</td>
<td>Image Reconstruction Algorithm for Electrical Impedance Tomography Based on Block Sparse Bayesian Learning</td>
<td>Shengheng Liu (University of Edinburgh, United Kingdom (Great Britain)), Jiabin Jia (University of Edinburgh, United Kingdom (Great Britain)), Yunjie Yang (University of Edinburgh, United Kingdom (Great Britain))</td>
</tr>
</tbody>
</table>
Thursday, October 19

11:35  Nonlinear temperature field reconstruction using acoustic tomography  
Yong Bao (University of Edinburgh, United Kingdom (Great Britain))  
Jiabin Jia (University of Edinburgh, United Kingdom (Great Britain))

11:50  An image reconstruction method for improving resolution of capacitive wire mesh tomography  
Weimin Lao (Tsinghua University, P.R. China)  
Lihui Peng (Tsinghua University, P.R. China)  
Yi Li (Tsinghua University, P.R. China)

12:05  Local Integrated Absorbance Tomography Based on Revised Iterative Reconstruction-Reprojection Algorithm  
Wenqiang Zhang (Beihang University, P.R. China)  
Lijun Xu (Beihang University, P.R. China)  
Qianwei Qu (Beihang University, P.R. China)  
Zhang Cao (Beihang University, P.R. China)  
Jiangtao Sun (Beihang University, P.R. China)

11:20 - 12:20  
SPECIAL SESSION: Image processing and pattern recognition III  
Meeting Room 8  
Chair: Ali AlSuwaidi (University of Manchester, United Kingdom (Great Britain))  
Pengfei Shi (Shanghai Jiao Tong University, P.R. China)

11:20  HEVC based Mixed-resolution Stereo Video Coding for Low Bitrate Transmission  
Bruhanth Mallik (Leeds Beckett University, United Kingdom (Great Britain))  
Akbar Sheikh Akbari (Leeds Beckett University, United Kingdom (Great Britain))  
Ah-Lian Kor (Leeds Beckett University, United Kingdom (Great Britain))

11:35  Spectral-Texture Approach to Hyperspectral Image Analysis for Plant Classification with SVMs  
Ali AlSuwaidi (University of Manchester, United Kingdom (Great Britain))  
Bruce Grieve (University of Manchester, United Kingdom (Great Britain))  
Hujun Yin (University of Manchester, United Kingdom (Great Britain))

11:50  Fast Shape Matching and Retrieval with Dynamic Angular Partition Descriptor  
Pengfei Shi (Shanghai Jiao Tong University, P.R. China)  
Yongkun Wang (Shanghai Jiao Tong University, P.R. China)  
Ying Hu (Shanghai Jiao Tong University, P.R. China)  
Yaohui Jin (Shanghai Jiaotong University, P.R. China)
Thursday, October 19

12:05  Analysis of Pool Characteristics and Correlation Using Auxiliary Optical Imaging during High Power Laser Welding
Guiqian Liu (Guangdong University of Technology, P.R. China)
Xiangdong Gao (Guangdong University of Technology, P.R. China)
Deyong You (Guangdong University of Technology, P.R. China)
Yaowu Song (Guangdong University of Technology, P.R. China)
Nanfeng Zhang (Guangdong University of Technology, P.R. China)

12:20 – 13:30
Lunch (Beihang Training Center Restaurant)

13:30 - 14:30
Sensors for Aerospace Applications II and Imaging
Meeting Room 2
Chair: Christian Pfaab (Universität Bremen, Germany)
Jianli Li (Beihang University, P.R. China)

13:30  An Airborne Position and Orientation System (POS) for Remote Sensing
Fengguang Zhai (Beihang University, P.R. China)
Jianli Li (Beihang University, P.R. China)
Haitao Qiu (Aerospace Control Devices, P.R. China)
Wen Ye (Beihang University, P.R. China)
Bin Gu (Beihang University, P.R. China)
Zhaoxing Lu (Xi'an Institute of High-tech, P.R. China)

13:45  Application of Spatial Heterodyne Spectroscopy Interferometer in Velocity Measurement and Error Analysis
Yanghao Lin (Beihang University, P.R. China)
Yan Zhao (Beihang University, P.R. China)
Falin Wu (Beihang University, P.R. China)

14:00  A comparison of feature detection in low atmospheric pressure using thermal and visible images
Helia Sharif (German Aerospace Center (DLR) & Universität Bremen, Germany)
Christian Pfaab (Universität Bremen, Germany)
Matthew Hölzel (Universität Bremen, Germany)

14:15  Research on SNR prediction technology based on reservoir computing in wireless transmission of satellite communication system
Bowen Sun (Harbin Engineering University, P.R. China)
Thursday, October 19

13:30 - 14:30
Deep Learning II
Meeting Room 3
Chair: Fuqiang Zhou (Beihang University, P.R. China)
Na Ying (Hangzhou Dianzi University, China)

13:30  Blur Image Classification based on Deep Learning
   Rui Wang (Beihang University, P.R. China)
   Wei Li (Beihang University, P.R. China)
   Runnan Qin (Beihang University, P.R. China)
   JinZhong Wu (The Third Research Institute of China Electronics Technology
   Group Corporation, P.R. China)

13:45  Stereo Matching and Depth Map Collection Algorithm Based on Deep
   Learning
   Hao Xu (Beihang University, P.R. China)

14:00  Fast Vehicle Detection Based on Evolving Convolutional Neural Network
   Fengbin Zhu (Hangzhou Dianzi University, USA)
   Youfei Lu (Hangzhou Dianzi University, P.R. China)
   Ying Na (Hangzhou Dianzi University, P.R. China)
   George C Giakos (Manhattan College, USA)

14:15  Visual saliency-based vehicle manufacturer recognition using autoencoder
   pre-training deep neural networks
   Jiang Zhang (Beihang University, P.R. China)
   Yao Zhao (Beihang University, P.R. China)
   Fuqiang Zhou (Beihang University, P.R. China)
   Ming Chi (Beihang University, P.R. China)

13:30 - 14:30
SPECIAL SESSION: Image Analysis and Processing
Meeting Room 8
Chair: Dangxiao Wang (Beihang University, P.R. China)
 Fuqiang Zhou (Beihang University, P.R. China)

13:30  Analysis of Correlation Between Image Texture and Friction Coefficient of
   Materials
   Pengzhi Zhang (Beihang University, P.R. China)
   Dangxiao Wang (Beihang University, P.R. China)
   Yuru Zhang (Beihang University, P.R. China)
Thursday, October 19

13:45  Global Calibration Approach for 3D Vision System Carried by Moving Robot Used for Measuring Inner Surface of Long Pipeline  
Ming Chi (Beihang University, P.R. China)  
Haishu Tan (Foshan University, P.R. China)  
Fuqiang Zhou (Beihang University, P.R. China)  
Xin Chen (Beihang University, P.R. China)

14:00  Train Wheel Tread Defects Detection Based on Image Registration  
Shoulu Lv (Beihang University, P.R. China)  
Fuqiang Zhou (Beihang University, P.R. China)  
Zhenzhong Wei (Beihang University, P.R. China)

14:30 - 15:45  
SPECIAL SESSION: Tomographic Devices: Clinical and Industrial Applications  
Meeting Room 2  
Chair: Hancong Wu (University of Edinburgh, United Kingdom (Great Britain))  
Xinwu Li (Chinese Academy of Sciences, P.R. China)

14:30  Phase aberration correction by bent-ray tracing method for ultrasound computed tomography  
Xiaolei Qu (Beihang University, P.R. China)  
Takashi Azuma (The University of Tokyo, Japan)  
Shangchun Fan (Beihang University, P.R. China)

14:45  Imaging cell-drug response in 3D bioscaffolds by electrical impedance tomography  
Hancong Wu (Agile Tomography Group, School of Engineering, University of Edinburgh, United Kingdom (Great Britain))  
Yunjie Yang (University of Edinburgh, United Kingdom (Great Britain))  
Pierre Bagnaninchi (The University of Edinburgh, United Kingdom (Great Britain))  
Jiabin Jia (University of Edinburgh, United Kingdom (Great Britain))

15:00  Imaging and detection of cracks based on a multi-frequency electromagnetic scanning instrument and SVM  
Liyuan Yin (Kunming University of Science and Technology, P.R. China)  
Jiande Wu (Kunming University of Science and Technology, P.R. China)  
Bo Ye (Kunming University of Science and Technology, P.R. China)  
Jorge Salas Avila (The University of Manchester, United Kingdom)  
Hanyang Xu (The University of Manchester, United Kingdom)  
Kin Yau How (The University of Manchester, United Kingdom)  
Yang Tao (The University of Manchester, United Kingdom)  
Wuliang Yin (The University of Manchester, United Kingdom)
### Thursday, October 19

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:15</td>
<td><strong>A New Discontinuous Synthetic Aperture Radar Imaging Framework</strong></td>
<td>Yan Wang (Tsinghua University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jian Yang (Tsinghua University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jingwen Li (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>15:30</td>
<td><strong>Sparse reconstruction-based SAR Tomography and It’s Application</strong></td>
<td>Xinwu Li (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xing Peng (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lei Liang (the Institute of Remote Sensing and Digital Earth, CAS, P.R. China)</td>
</tr>
</tbody>
</table>

**Imaging Sensors and Detectors II**  
Meeting Room 3  
Chair: Xinguo Wei (Beijing University of Aeronautics & Astronautics, P.R. China)  
Nvjie Ma (Guangdong University of Technology, P.R. China)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:30</td>
<td><strong>Magneto-Optical Imaging Characteristics of Weld Defects under Alternating Magnetic Field Excitation</strong></td>
<td>Nvjie Ma (School of Electromechanical Engineering, Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xiangdong Gao (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yaowu Song (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nanfeng Zhang (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td>14:45</td>
<td><strong>Rapid Preprocessing of FMCW GB-SAR Echo Based on FPGA</strong></td>
<td>Hesheng Pu (Chongqing Three Gorges University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zefu Tan (China University of Mining and Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tian Weiming (Beijing Institute of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cheng Hu (Beijing Institute of Technology, P.R. China)</td>
</tr>
<tr>
<td>15:00</td>
<td><strong>SAR Imaging of Thick Composite Structures using Circular Aperture Probe</strong></td>
<td>Xingyu Xie (Khalifa University of Science and Technology, United Arab Emirates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohammed Rahman (Khalifa University -The Petroleum Institute, United Arab Emirates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohamed A Abou-Khousa (Khalifa University of Science and Technology &amp; Petroleum Institute, United Arab Emirates)</td>
</tr>
<tr>
<td>15:15</td>
<td><strong>Parameters optimization of image sensor for star sensors</strong></td>
<td>Yuan Fang Liao (Beihang University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xinguo Wei (Beijing University of Aeronautics &amp; Astronautics, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gangyi Wang (Beihang University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jian Li (Beihang University, P.R. China)</td>
</tr>
</tbody>
</table>
Thursday, October 19

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:30</td>
<td>Improving Fourier Ptychographic Microscopy by Spatially Distributed Exposure Time</td>
<td>Ningchao Diao (Tsinghua University, P.R. China)</td>
</tr>
</tbody>
</table>
| 14:45  | Coupled K-SVD Dictionary Learning Algorithm in Wavelet Domain for Single Image Super-Resolution | Junaid Ahmed (Eastern Mediterranean University, Gazimagusa, via Mersin 10, Turkey)  
Gulsher Baloch (Eastern Mediterranean University, Turkey)  
Huseyin Ozkaramanli (Eastern Mediterranean University, Turkey) |
| 15:00  | Coupled Directionally Structured Dictionaries for Single Image Super-Resolution | Junaid Ahmed (University of Electronic Science and Technology, P.R. China)  
Gulsher Baloch (Eastern Mediterranean University, Turkey)  
Anam Bhatti (Liaquat University of Medical and Health Sciences, Pakistan)  
Reinhard Klette (Auckland University of Technology, New Zealand) |
| 15:15  | Improved Dictionary Learning Algorithm with Mappings for Single Image Super-Resolution | Fayaz Ali Dharejo (University of Electronic Science and Technology, P.R. China & Indus University, Karachi, Pakistan)  
Zongbo Hao (University of Electronic Science and Technology, P.R. China)  
Anam Bhatti (Liaquat University of Medical and Health Sciences, Pakistan)  
Mairaj Nabi Bhatti (Shaheed Benazir Bhutto University, Pakistan)  
Junaid Ahmed (Sukkur IBA University, Pakistan)  
Munsif Ali Jatoi (Indus University Karachi Pakistan, P.R. China) |
| 15:30  | Wavelet Domain Based Directional Dictionaries for Single Image Super-Resolution | Junaid Ahmed (University of Electronic Science and Technology, P.R. China)  
Bin Gao (University of Electronic Science and Technology, P.R. China)  
Gui Yun Tian (University of Electronic Science and Technology, P.R. China) |
Thursday, October 19

15:45 - 16:45
Autonomous Aerial and Underwater Imaging Systems and Compressive Sensing Imaging
Meeting Room 2
Chair: Scott Tancock (University of Bristol, United Kingdom (Great Britain))
Zelong Xiao (Nanjing University of Science and Technology, P.R. China)

15:45  Real-Time Stereo Vision for Collision Detection on Autonomous UAVs
Aleksandar Stanoev (University of Bristol, United Kingdom (Great Britain))
Nicolas Audinet (University of Bristol, United Kingdom (Great Britain))
Scott Tancock (University of Bristol, United Kingdom (Great Britain))
Naim Dahnoun (University of Bristol, United Kingdom (Great Britain))

16:00  A Coding Method for Single-channel Passive Millimeter Wave Imaging Based on Cyclic S Matrix
Zelong Xiao (Nanjing University of Science and Technology, P.R. China)
Caoyang Fan (Nanjing University of Science and Technology, P.R. China)
Ruoling Xiao (Nanjing University of Science and Technology, P.R. China)
Yuankai Wang (Nanjing University of Science and Technology, P.R. China)
Xuan Lu (Nanjing University of Science And Technology, P.R. China)

16:15  Distributed Compressive Sensing for Multi-Baseline Circular SAR Image formation
Masoud Farhadi (School of Electronic and Information Engineering, Beihang University, P.R. China)
Jie Chen (School of Electronics and Information Engineering, Beihang University, P.R. China)

16:30  Designing a Small-sized Autonomous Underwater Vehicle Architecture for Regular Periodic Fish-cage Net Inspection
Vaggelis Chalkiadakis (Hellenic Centre for Marine Research, Greece)
Nikos Papandreoukakis (Hellenic Centre for Marine Research, Greece)
George Livanos (Technical University of Crete, Greece)
Konstantia Moirogiorgou (TUC/Electronic and Computer Engineering, Greece)
George C Giakos (Manhattan College, USA)
Michalis Zervakis (Technical University of Crete, Greece)
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:45</td>
<td>Visual Inspection of Pulsed Nd:YAG Laser Welding of PMMA and Stainless Steel 304</td>
<td>Yijie Huang (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xiangdong Gao (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yaowu Song (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nanfeng Zhang (Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nvjie Ma (School of Electromechanical Engineering, Guangdong University of Technology, P.R. China)</td>
</tr>
<tr>
<td>16:00</td>
<td>A semi-automatic algorithm for reconstruction and NURBS surface generation of thoracic aorta</td>
<td>Panagiotis Koulountzios (Technical University of Crete, Greece)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Michalis Zervakis (Technical University of Crete, Greece)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panagiotis Karakitsios (National Technical University of Athens, Greece)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>George Stavroulakis (Technical University of Crete, Greece)</td>
</tr>
<tr>
<td>16:15</td>
<td>Convolutional neural network and adaptive guided image filter based stereo matching</td>
<td>Sihan Wen (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>16:30</td>
<td>Applied Microwave Imaging of Composite Structures Using Open-Ended Circular Waveguides</td>
<td>Muhammed Shafi K. T. (Khalifa University-The Petroleum Institute, United Arab Emirates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohammed Rahman (Khalifa University-The Petroleum Institute, United Arab Emirates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohamed A Abou-Khousa (Khalifa University-The Petroleum Institute, United Arab Emirates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohammad Ramzi (Khalifa University-The Petroleum Institute, United Arab Emirates)</td>
</tr>
</tbody>
</table>
Thursday, October 19

15:45 – 16:45
Simulations and Measurements I
Meeting Room 8
Chair: Yixin Ma (Shanghai Jiao Tong University, P.R. China)
       Sihan Wen (Beihang University, P.R. China)

15:45  Simulation on applying Gabor filtering method to direct laser absorption spectroscopy
       HaiBin Cui (Zhejiang University & College of Energy Engineering, P.R. China)
       Fei Wang (Zhejiang University, P.R. China)

16:00  Correcting Ionospheric and Orbital Errors in Spaceborne SAR Differential Interferograms
       Kamel Hasni (Center of Space Techniques, Algeria)
       Jie Chen (School of Electronics and Information Engineering, Beihang University, P.R. China)
       Wei Guo (Beihang University, P.R. China)

16:15  Thoracic Impedance Measurement for Lung Function Evaluation
       Yixin Ma (Shanghai Jiao Tong University, P.R. China)
       Hua Li (Shanghai Jiao Tong University, P.R. China)
       Hang Xu (Shanghai Jiao Tong University, P.R. China)
       Peng Qin (Shanghai Jiao Tong University, P.R. China)
       Xiaojun Ji (Shanghai Jiao Tong University, P.R. China)
       Tao Han (Shanghai Jiao Tong University, P.R. China)
       Ping Cai (Shanghai Jiao Tong University, P.R. China)
       Hui Qin (Shanghai Jiao Tong University, P.R. China)

16:30  Sparse inverse covariance network-based modeling for mild cognitive impairment classification
       Jie Huang (Beihang University, P.R. China)
       Yang Li (Beihang University, P.R. China)

16:00 – 18:00
Poster Session

Face Illumination Invariant Feature Extraction Based on Edge Detection Operator
       Wenyi Xiong (Chongqing Three Gorges University, P.R. China)
       Xiangfei Nie (Chongqing Three Gorges University, P.R. China)
       Xing Zou (Chongqing Three Gorges University, P.R. China)
       Xue He (Yunnan Water Resources Hydropower Vocational College China, P.R. China)
       Zhijun Yang (Chongqing Three Gorges University, P.R. China)
Real time imaging processing of ground-based SAR based on multicore DSP
Zhijun Yang (Chongqing Three Gorges University, P.R. China)
Xiangfei Nie (Chongqing Three Gorges University, P.R. China)
Tian Weiming (Beijing Institute of Technology, P.R. China)
Wenyi Xiong (Chongqing Three Gorges University, P.R. China)
Xiaowei Niu (Chongqing Three Gorges University, P.R. China)

16:45 - 17:00
Coffee/Tea Break

17:00 - 17:45
Image Segmentation II
Room: Meeting Room 2
Chair: Sotirios Diamantas (University of Nevada, Reno, USA)
Jinyu Yang (Beihang University, P.R. China)

17:00 The Research of Face Detection Method Based on Adaboost Algorithm and Skin Color Segmentation
Chang Liu (Beihang University, P.R. China)

17:15 Localize Car Door Handles with Image Segmentation and Saliency Detection
Fan Zhang (Beihang University, P.R. China)
Mengchao Hao (Beihang University, P.R. China)
Muyang Liu (Beihang University, P.R. China)
Jinyu Yang (Beihang University, P.R. China)

17:30 Modeling Pixel Intensities with Log-Normal Distributions for Background Subtraction
Sotirios Diamantas (University of Nevada, Reno, USA)
Kostas Alexis (University of Nevada, Reno, USA)

17:00 – 17:45
Applications of Medical Image Processing
Meeting Room 3
Chair: George C Giakos (Manhattan College, USA)
Fengying Xie (Image Processing Center, Beihang University, P.R. China)

17:00 Application of SVM Based on Genetic Algorithm in Classification of Cataract Fundus Images
Zhiqiang Qiao (Beijing University of Posts and Telecommunications, P.R. China)
Qinian Zhang (Beijing University of Posts and Telecommunications, P.R. China)
Yanyan Dong (Beijing University of Posts and Telecommunications, P.R. China)
Ji-Jiang Yang (Tsinghua University, P.R. China)
### Thursday, October 19

**17:15**  
**A tissue classification approach for brain tumor segmentation using MRI**  
Vasileios Pezoulas (Technical University of Crete, Greece)  
Ifigeneia Pologiorgi (Technical University of Crete, Greece)  
Stavros Seferlis (Chania General Hospital Agios Georgios, Greece)  
Georgios Tsalikis (Chania General Hospital Agios Georgios, Greece)  
Georgios Zarifis (Chania General Hospital Agios Georgios, Greece)  
George C Giakos (Manhattan College, USA)  
Michalis Zervakis (Technical University of Crete, Greece)

**17:30**  
**Multi-classification of skin diseases for dermoscopy images using deep learning**  
Hangning Zhou (Image Processing Center, Beihang University, P.R. China)  
Fengying Xie (Image Processing Center, Beihang University, P.R. China)  
Zhiguo Jiang (Image Processing Center, Beijing University of Aeronautics and Astronautics, P.R. China)  
Jie Liu (Peking Union Medical College Hospital, P.R. China)  
Shiqi Wang (Peking Union Medical College Hospital, P.R. China)  
Chenyu Zhu (Peking Union Medical College Hospital, P.R. China)

| 17:00 – 17:45 | Feature Extraction and Classification  
Meeting Room 8  
Chair: Syed Muhammad Anwar (University of Engineering and Technology Taxila, Pakistan) & Chang Xiao Min (Tianjin University of Science and Technology, P.R. China) |

| 17:00 | **Homogeneity Patch Search Method for Efficient Vehicle Color Classification Using Front-of-Vehicle Image**  
Daejin Park (Kyungpook National University (KNU), Korea)  
Yoosoo Jeong (Kyungpook National University (KNU), Korea)  
Kil Houm Park (Kyungpook National University (KNU), Korea) |

| 17:15 | **Electrocardiogram Signal Classification to Detect Arrythmia with Improved Features**  
Maheen Gul (University of Engineering and Technology, Taxila, Pakistan)  
Syed Muhammad Anwar (University of Engineering and Technology Taxila & Signal, Image, Multimedia Processing and Learning, Pakistan)  
Muhammad Majid (University of Engineering and Technology Taxila, Pakistan) |

| 17:30 | **Feature Extraction of Lung Ventilation by Biomedical Electrical Impedance Tomography**  
Chen Xiao Yan (Tianjin University of Science and Technology, P.R. China)  
Chang Xiao Min (Tianjin University of Science and Technology, P.R. China) |

**18:00 - 21:00**  
Dinner (Beihang Training Center Restaurant)
## SPECIAL SESSION: Medical Imaging: Devices, Image Analysis and Processing

### Meeting Room 2

**Chair:** Andrzej Skalski (AGH University of Science and Technology, Poland) & Jianguo Ma (Beihang University, P.R. China)

### 08:45

**Breast Cancer Detection by Microwave Imaging System using Wearable Conformal Antenna Array**  
Fengzhou Wang (University of Edinburgh, United Kingdom (Great Britain))  
Tughrul Arslan (University of Edinburgh & Sensewhere Ltd., United Kingdom (Great Britain))  
Guohua Wang (Beihang University, P.R. China)

### 09:00

**An algorithm for evaluating inter- and intra-observer variability of boundary delineation providing local information about deviation for anisotropic image data**  
Andrzej Skalski (AGH University of Science and Technology, Poland)

### 09:15

**Ultrasonic Spectral Analysis for Biomedical Imaging**  
Jianguo Ma (Beihang University, P.R. China)  
Min Wei (Beihang University, P.R. China)  
Boya Chen (Beijing Anzhen Hospital of Capital Medical University, P.R. China)  
Zijie Fang (Beihang University, P.R. China)  
Yulin Liu (Beijing Anzhen Hospital of Capital Medical University, P.R. China)  
Jie Du (Beijing Anzhen Hospital of Capital Medical University, P.R. China)  
Lijun Xu (Beihang University, P.R. China)

### 09:30

**A CNN Based Volumetric Imaging Method With Single X-ray Projection**  
Ran Wei (Beihang University, P.R. China)  
Fugen Zhou (Beihang University, P.R. China)  
Bo Liu (Beihang University, P.R. China)  
Bin Liang (Beihang University, P.R. China)  
Bin Guo (Beihang University, P.R. China)  
Xuangang Xu (Beihang University, P.R. China)

### 09:45

**Fully automated identification of heart sounds for the analysis of cardiovascular pathology**  
Sidra Ghafoor (Bahria University, Pakistan)  
Muhammad Usman Akram (CEME NUST, Pakistan)  
Ammara Nasim (Bahria University, Pakistan)  
Taimur Hassan (Bahria University, Islamabad, Pakistan)
08:45 – 10:00
SPECIAL SESSION: Tomographic Devices: Clinical and Industrial Applications I
Meeting Room 3
Chair: Yunjie Yang (University of Edinburgh, United Kingdom (Great Britain)) & Yanbin Xu (Tianjin University, P.R. China)

08:45  Effect of Parasitic Resistance in Electrical Resistance Tomography with Voltage Excitation
Marco Antonio Rodriguez Frias (University of Manchester, United Kingdom (Great Britain))
Wuqiang Yang (The University of Manchester, United Kingdom (Great Britain))

09:00  Simulation Study of Scaffold 3D Cell Culture Imaging Using A Miniature Planar EIT Sensor
Yunjie Yang (University of Edinburgh, United Kingdom (Great Britain))
Hancong Wu (Agile Tomography Group, School of Engineering, University of Edinburgh, United Kingdom (Great Britain))
Jiabin Jia (University of Edinburgh, United Kingdom (Great Britain))

09:15  A New Regularization Method for Electrical Impedance Tomography
Bing Han (Tianjin University, P.R. China)
Yanbin Xu (Tianjin University, P.R. China)
Feng Dong (Tianjin University, P.R. China)

09:30  A fast iterative p-thresholding algorithm for sparse reconstruction of electrical tomography
Zheng Wang (Tianjin University, P.R. China)
Yanbin Xu (Tianjin University, P.R. China)
Feng Dong (Tianjin University, P.R. China)

09:45  Construction of Sensitivity Matrix Involving Location Information for Ultrasound Modulated Electrical Impedance Tomography
Shengnan Zhang (Tianjin University, P.R. China)
Yanbin Xu (Tianjin University, P.R. China)
Feng Dong (Tianjin University, P.R. China)

08:45 – 10:00
Remote Sensing, Ladars, Lidars and Electromagnetic Scattering
Meeting Room 8
Chair: Xiaolu Li (Beihang University, P.R. China)
Ekin Arabul (University of Bristol, United Kingdom (Great Britain))

08:45  Leaf Moisture Content Measurement using Polarized Active Imaging LiDAR
Xinhao Xie (Beihang University, P.R. China)
Lijun Xu (Beihang University, P.R. China)
Xiaolu Li (Beihang University, P.R. China)
09:00  Variable Parameter Estimation of SAR Signal Based on Compression Sensing  
Shuai Gao (Beihang University, P.R. China)  
Huaping Xu (Beihang University, P.R. China)  
Xue Qiu (National University of Defense Technology, P.R. China)  
Bo Yang (Beihang University, P.R. China)

09:15  Polariometric SAR Oil Spill Detection based on Deep Networks  
Guandong Chen (Beijing University of Technology, P.R. China)  
Yu Li (Beijing University of Technology, P.R. China)  
Guangmin Sun (Beijing University of Technology, P.R. China)  
Yuanzhi Zhang (National Astronomical Observatories, P.R. China)

09:30  Precise Multi-Channel Timing Analysis System for Multi-Stop LIDAR Correlation  
Ekin Arabul (University of Bristol, United Kingdom (Great Britain))  
Ayoub Girach (University of Bristol, United Kingdom (Great Britain))  
John Rarity (University of Bristol, United Kingdom (Great Britain))  
Naim Dahnoun (University of Bristol, United Kingdom (Great Britain))

09:45  3-D SAR Imaging Algorithm Application in Blast Furnace Stock Lines  
Jiangying Li (University of Science and Technology Beijing, P.R. China)  
Xianzhong Chen (University of Science and Technology Beijing, P.R. China)  
Qingwen Hou (University of Science and Technology Beijing, P.R. China)  
Zhengpeng Wang (Beihang University, P.R. China)

10:00 - 10:45  
Modeling and Applications in imaging  
Meeting Room 2  
Chair: Deming Wang (Tianjin Polytechnic University, P.R. China)

10:00  Application of self-adaptive generalized predictive control in the spinning process of absorbable suture  
Xiuwu Sui (School of Mechanical Engineering, Tianjin Polytechnic University, P.R. China)  
Deming Wang (Tianjin Polytechnic University, P.R. China)  
Shuo Wang (School of Mechanical Engineering, Tianjin Polytechnic University, P.R. China)  
Yang Zhang (Tianjin Polytechnic University, P.R. China)  
Yao Li (Tianjin Polytechnic University, P.R. China)

10:22  An Image Processing Approach for Characterizing Working Frequency of Pulse Combustion  
Lijun Xu (Beihang University, P.R. China)  
Fangyan Li (Beihang University, P.R. China)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>Remote Sensing Image Registration Based on Feature Points of Global Edge</td>
<td>Siying Liu (Beihang University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jie Jiang (Beijing University of Aeronautics &amp; Astronautics, P.R. China)</td>
</tr>
<tr>
<td>10:15</td>
<td>A motion deblurring method of a light field camera</td>
<td>Lijuan Su (Beihang University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tiansheng Zhang (Beihang, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yan Yuan (Beihang University, P.R. China)</td>
</tr>
<tr>
<td>10:30</td>
<td>Alzheimer's Disease Classification Based on Combination of Multi-model Convolutional Networks</td>
<td>Fan Li (Shanghai Jiao Tong University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Danni Cheng (Shanghai Jiao Tong University, P.R. China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manhua Liu (Shanghai Jiao Tong University, P.R. China)</td>
</tr>
<tr>
<td>10:45</td>
<td>Face Recognition Based in Geodesic Distance Approximations Between Multivariate Normal Distributions</td>
<td>John Soldera (UFRGS, Brazil)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kit Dodson (University of Manchester, Brazil)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jacob Scharcanski (UFRGS, Brazil)</td>
</tr>
<tr>
<td>11:00</td>
<td>Student Awards and Closing Ceremony</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Room: Meeting Room 8</td>
<td></td>
</tr>
</tbody>
</table>