## Conference Program

<table>
<thead>
<tr>
<th>Time</th>
<th>November 7, 2016 (Monday)</th>
<th>November 8, 2016 (Tuesday)</th>
<th>November 9, 2016 (Wednesday)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Registration</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4F, Fujian Hall)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:30-09:40</td>
<td>Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4F, Fujian Hall)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:40-10:40</td>
<td>Keynote Speech (I)</td>
<td>Keynote Speech (III)</td>
<td>Session E</td>
</tr>
<tr>
<td></td>
<td>Prof. Alessandro Piva</td>
<td>Prof. Zhiyong Liu</td>
<td>(5F, Fujian Hall)</td>
</tr>
<tr>
<td></td>
<td>(4F, Fujian Hall)</td>
<td>(4F, Fujian Hall)</td>
<td></td>
</tr>
<tr>
<td>10:40-11:00</td>
<td>Coffee Break</td>
<td></td>
<td>Coffee Break</td>
</tr>
<tr>
<td></td>
<td>(4F, Fujian Hall)</td>
<td></td>
<td>(5F, Fujian Hall)</td>
</tr>
<tr>
<td>11:00-12:00</td>
<td>Keynote Speech (II)</td>
<td>Keynote Speech (IV)</td>
<td>Session F</td>
</tr>
<tr>
<td></td>
<td>Prof. Han-Chieh Chao</td>
<td>Prof. Poki Chen</td>
<td>(5F, Fujian Hall)</td>
</tr>
<tr>
<td></td>
<td>(4F, Fujian Hall)</td>
<td>(4F, Fujian Hall)</td>
<td></td>
</tr>
<tr>
<td>12:00-14:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1F, Guest Building)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00-15:30</td>
<td>Session A</td>
<td>Session C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5F, Fujian Hall)</td>
<td>(5F, Fujian Hall)</td>
<td></td>
</tr>
<tr>
<td>15:30-15:50</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5F, Fujian Hall)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:50-17:20</td>
<td>Session B</td>
<td>Session D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5F, Fujian Hall)</td>
<td>(5F, Fujian Hall)</td>
<td></td>
</tr>
<tr>
<td>18:00</td>
<td>Welcome Reception</td>
<td>Banquet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1F, Guest Building)</td>
<td>(1F, Guest Building)</td>
<td></td>
</tr>
</tbody>
</table>
Keynote Speech

**Keynote Speech (I):** Advances on Multimedia Forensics  
**Speaker:** Prof. Alessandro Piva, University of Florence, Italy.  
**Date:** November 7, 2016 (Monday)  
**Time:** 09:40-10:40  
**Room:** 4F, Fujian Hall

**Keynote Speech (II):** IoT and Big Data Applications  
**Speaker:** Prof. Han-Chieh Chao, National Dong Hwa University, Taiwan.  
**Date:** November 7, 2016 (Monday)  
**Time:** 11:00-12:00  
**Room:** 4F, Fujian Hall

**Keynote Speech (III):** Energy Efficiency for Cloud Computing and Data Centers  
**Speaker:** Prof. Zhiyong Liu, Institute of Computing Technology, Chinese Academy of Sciences, China.  
**Date:** November 8, 2016 (Tuesday)  
**Time:** 09:40-10:40  
**Room:** 4F, Fujian Hall

**Keynote Speech (IV):** Intelligent Sensing: From Macroscopic to Microscopic Scale  
**Speaker:** Prof. Poki Chen, National Taiwan University of Science and Technology, Taiwan.  
**Date:** November 8, 2016 (Tuesday)  
**Time:** 11:00-12:00  
**Room:** 4F, Fujian Hall
**Session A: Intelligent Data Analysis and Processing**

**Date:** November 7, 2016 (Monday)  
**Time:** 14:00-15:30  
**Room:** 5F, Fujian Hall  
**Session Chairs:** Prof. Sebastián Basterrech, VŠB-Technical University of Ostrava, Czech Republic.  
Prof. Shi-Jian Liu, Fujian University of Technology, China.

1. The Complex Vector Maxwell Equations and An Applied Research  
*Miaoyu Zhang, Baolong Guo, Jie Wu*
2. Passenger Hailing Safety PASW Modeler and Big Data Statistical Analysis Study  
*S.H. Meng, A.C. Huang, T.J. Huang, J. Chen, J.S. Pan*
3. Cellular Automaton Rule Extractor  
*Lukas Kroczek, Ivan Zelinka*
4. Recovery of Compressed Sensing Microarray using Sparse Random Matrices  
*Zhenhua Gan, Baoping Xiong, Fumin Zou, Yueming Gao, Min Du*
5. The Reliability and Economic Analysis Comparison Between Parallel System and Erlang Distribution System  
*Lin Xu, Chao-Fan Xie, Lu-Xiong Xu*
6. Estimating Human Activities from smartwatches with Feedforward Neural Networks  
*Sebastián Basterrech*

**Session B: Innovative E-learning and Applications**

**Date:** November 7, 2016 (Monday)  
**Time:** 15:50-17:20  
**Room:** 5F, Fujian Hall  
**Session Chairs:** Prof. Pei-Shu Tsai, National Changhua University of Education, Taiwan.  
Prof. You-Te Lu, Southern Taiwan University of Science and Technology, Taiwan.

1. Application of E-Learning in Teaching of English as a Second Language  
*Pei-Wei Tsai, Pei-Shu Tsai, Powen Ku, Vaci Istanda, Tarek Gabe*
2. A Case Study on Information Literacy and the Use of Social Media for Senior Learners  
*You-Te Lu, Yi-Hsing Chang, Tien-Wen Sung*
3. Establishing a Game-Based Learning Cloud  
*Yi-Hsing Chang, Jheng-Yu Chen, Rong-Jyue Fang, You-Te Lu*
4. A Study on Smart Deployment for Real-time Strategy Games  
*Cheng-Ta Yang, Bing-Chang Chen, Her-Tyan Yeh, Guo-Xiang Jian*
5. A Learning approach to Hierarchical Features for Automatic Music Composition  
*Michele Della Ventura*
Session C: *Image Processing and Applications*

**Date:** November 8, 2016 (Tuesday)

**Time:** 14:00-15:30

**Room:** 5F, Fujian Hall

**Session Chairs:** Prof. Yunyi Yan, Xidian University, China.
Prof. Rui Xu, Fujian University of Technology, China.

1. Image Classification Based on Image Hash Convolution Neural Network  
   *Yaoxing Chen, Yunyi Yan, Dan Zhao*

2. Object Recognition based on Superposition Proportion in Binary Images  
   *Yan Zheng, Baolong Guo, Jing Ma*

3. Piecewise planar region matching for high-resolution aerial video tracking  
   *Meng Yi, Li-chun SUI*

4. Salient Object Detection Based on Histogram-based Contrast and Guided Image Filtering  
   *Pingping Zeng, Fanjie Meng, Ruixia Shi, Dalong Shan, Yanlong Wang*

5. A New Method for Extraction of Residential Areas from Multispectral Satellite Imagery  
   *Rui Xu, Yanfang Zeng, Quan Liang*

6. Thresholding method based on the relative homogeneity between the classes  
   *Hong Zhang, Wenyu Hu*

---

Session D: *Innovative Technology and Applications*

**Date:** November 8, 2016 (Tuesday)

**Time:** 15:50-17:20

**Room:** 5F, Fujian Hall

**Session Chairs:** Dr. Trong-The Nguyen, National Kaohsiung University of Applied Sciences, Taiwan.  
Prof. Chih-Feng Wu, Fujian University of Technology, China.

1. Searching of Circular Neighborhoods in the Square and Hexagonal Regular Grids  
   *Vojtěch Uher, Petr Gajdoš, Václav Snášel*

2. Tooth Segmentation from Cone Beam Computed Tomography Images Using the Identified Root Canal and Harmonic Fields  
   *Shi-Jian Liu, Zheng Zou, Ye Liang, Jeng-Shyang Pan*

3. A Moving Object Detection Algorithm Based on A Combination Optical Flow and Edge Detection  
   *Yao Xi, Ke-bin Jia, Zhong-hua Sun*

4. The real-time depth map obtainment based on stereo matching  
   *Fei Wang, Kebin Jia, Jinchao Feng*

5. Handwritten Numbers and English Characters Recognition System  
   *Wei Li, Xiaoxuan He, Chao Tang, Keshou Wu, Xuhui Chen, Shaoyong Yu, Yuliang Lei, Yanan Fang, Yuping Song*

6. Method for Noises Removel Based on PDE  
   *Baoping Xiong, Zhenhua Gan, Fumin ZOU, Yuemin Gao, Min Du*
Session E: Circuit Analysis and Systems

Date: November 9, 2016 (Wednesday)

Time: 09:40-10:40

Room: 5F, Fujian Hall

Session Chairs: Prof. Pei-Wei Tsai, Fujian University of Technology, China.

Prof. Zhu Quan, Fujian University of Technology, China.

(1) An XDL Analysis Method for SRAM-based FPGA
    Junfeng Liu, Yunyi Yan, Jinfu Wu
(2) Area Estimation for Triple Modular Redundancy Field Programmable Gate Arrays
    Hongjie He, Baolong Guo, Yunyi Yan
(3) Coupled Plasmonic Nanoantennas
    Hancong Wang
(4) A High Frequency Voltage-Controlled PWM/PSM Dual-Mode Buck DC-DC Converter
    Zhong Lun-Gui, Cheng Xin
(5) A Complex Network Based Classification of Covered Conductors Faults Detection
    Tomas Vantuch, Jan Gaura, Stanislav Misak, Ivan Zelinka

Session F: Networks and Security

Date: November 9, 2016 (Wednesday)

Time: 11:00-12:00

Room: 5F, Fujian Hall

Session Chairs: Prof. Sheng-Hui Meng, Fujian University of Technology, China.

Prof. Hancong Wang, Fujian University of Technology, China.

(1) Error Control Schemes for Robust Transmission with Compressed Sensing Signals
    Hsiang-Cheh Huang, Po-Liang Chen, Feng-Cheng Chang
(2) Research on the construction of college information applications based on Cloud Computing
    Zhu Quan
(3) Camellia Key Expansion Algorithm Based on Chaos
    Chuanfu Wang, Qun Ding
(4) The Key Exchange Algorithm in Network Encryption Machine
    Minghao Li, Qun Ding
    Xianghai Ge, Xinhua Jiang, Fumin Zou, Lvchao Liao