

**Day 1**                      **Monday, 8<sup>th</sup> August 2016**                      **Room 1**

**7:00-8:30am**              **Registration**

**8:30-9:20am**              **DASC/PICom/DataCom/CyberSciTech Opening**

**9:20-10:00am**            **Keynote I**

**10:00-10:40am**          **Keynote II**

**10:40-11:10am**          **Morning Tea**

**11:10-12:30pm**          **DataCom Session 1: Big Data System Software, Tools and Services**

1. **ZQL: A Unified Middleware Bridging Both Relational and NoSQL Databases**, *Jie Xu, Mengji Shi, Chaoyuan Chen, Zhen Zhang, Jigao Fu, Chi Harold Liu*
2. **G-Storm: a GPU-aware Storm Scheduler**, *Yi-Ren Chen, Che-Rung Lee*
3. **Big Data Framework for Analyzing Patents to Support Strategic R&D Planning**, *Wonchul Seo, Namhyoung Kim, Sungchul Choi*
4. **On the Incentive Effect of Reputation Systems**, *Han Jiao, Lu Lu, Zhanhua Xin*

**12:30-1:30pm**            **Lunch**

**1:30-2:45pm**            **User Modeling driven Personalized Services in Social Cyberspace (UMPSSC)**

1. **A Proportional Multi-Resource Scheduling Model in SDCloud**, *Hang Zhou, Qing Li, SaminaKausar, Hai Zhu*
2. **The Construction and Analysis of Baidu Baike Entry Network**, *Lei Wang, Lingyu Xu, Yunlan Xue, Gaowei Zhang, Yu Xiang*
3. **Socialized User Modeling in the Microblogging Scenarios for Interest Prediction**, *Mingqing Huang, Bofeng Zhang, Guobing Zou, Chengwei Gu, Peiye Wu, Shulin Cheng, Zhu Zhang*
4. **Overview of the Task Management System of Ternary Optical Computer**, *Sulan Zhang, Yi Jin*
5. **An Asynchronous Distributed ADMM Algorithm and Efficient Communication Model**, *Ling Fang, Yongmei Lei*

**2:45-3:10pm**            **Afternoon Tea**

**3:10-4:50pm**            **DataCom Session 2: Big Data Science, Theorems and Analytics - 1**

1. **NoWog: A Workload Generator for Database Performance Benchmarking**, *Parinaz Ameri, Nico Schlitter, Jörg Meyer, Achim Streit*
2. **A Context-Aware Trust Prediction Method Based on Behavioral Data Analysis in Distributed Network Environments**, *Guoyu Yang, Qibo Sun, Ao Zhou, Jinglin Li, Xiang Yuan, Hanyi Tang*
3. **Online Distance Measurement for Tree Data Event Streams**, *Eileen Kuehn, Achim Streit*
4. **Comparing Intention and Behavior: Characteristics of Valuable Information and Information Verification**, *Mathupayas Thongmak*
5. **Improving Recommendation Accuracy by Considering Electronic Word-of-Mouth and the Effects of Its Propagation Using Collective Matrix Factorization**, *Ren-Shiou Liu, Tian-Chih Yang*

#### **4:50-5:30pm      Poster Session**

1. **A Fault Injection Simulation Method Based on Petri Net**, *Haitao Liu, Guangxian Lv, Yu Huang, Peng Jin, Xueyuan Su*
2. **A Cyber Voice Recognition with Low SNR**, *Hua-An Zhao*
3. **Evaluation of Network Risk Using Attack Graph Based Security Metrics**, *Santosh Kumar, Anuradha Negi, Keshav Prasad, Aniket Mahanti*
4. **What Influence the Students' Learning Experience? The Impact of Peer Learning in an Online Environment**, *Songlak Sakulwichitsintu*
5. **An Efficient Tool for Industrial Control System Security Analysis**, *Chuangming Xia, Jing Tian, Erqing Li, Junwei Zhou, Jianwen Xiang, Jin Wang, Liang Bai, and Yueying He*
6. **An Analysis of Open Standard Identity Protocols in Cloud Computing Security Paradigm**, *Nitin Naik, Paul Jenkins*
7. **Collaborative Filtering and Deep Learning Based Hybrid Recommendation For Cold Start Problem**, *Jian Wei, Jianhua He, Kai Chen, Yi Zhou, Zuoyin Tang*
8. **Privacy-preserving Palm Print Authentication using Homomorphic Encryption**, *Jong-Hyuk Im, JinChun Choi, DaeHun Nyang, Mun-Kyu Lee*
9. **Log on Cloud: A SaaS Data Collection, Storage and Analysis Framework**, *Peng Xu, Yadong Zhang, Kai Shuang*
10. **Scalable Interactive Geo Visualization Platform for GIS Data Analysis**, *Lekha R.Nair, Sarath Saleem, Sujala D. Shetty*
11. **Stochastic Self-organisation of Poorly Structured Data and Memory Realisation in an Information Domain When Designing News Events Forecasting Models**, *Sergey Lesko, Dmitry Zhukov*
12. **Generation of the Single Precision BLAS Library for the Parallella platform, with Epiphany Co-processor Acceleration, Using the BLIS Framework**, *Miguel Tasende*
13. **Enhancing Mobility Management and Supporting 3D Visualization**, *Hanafy M. Ali*
14. **A Data Divergence Design Method for Testing Big Data Application**, *Zhenyu LIU, Yun HU, Lizhi CAI*
15. **Temporal and Spatial Trend Analysis of Cloud Spot Instance Pricing in Amazon EC2**, *Veena Khandelwal, Anand Chaturvedi and Chandra Prakash Gupta*
16. **Pyramid: Visual Analytics and Big Data Science Visualization for Frequent Patterns**, *Carson Leung*

17. **A Distributed and Autonomous Guard System Based on Cloud Environments**, *Wei-Fa Liao, Hung-Min Sun, Wei Wu*

**5:00-7:30pm**      **Welcome reception**

**Day 1**                      **Monday, 8<sup>th</sup> August 2016**                      **Room 2**

**7:00-8:30am**              **Registration**

**8:30-9:20am**              **DASC/PICom/DataCom/CyberSciTech Opening**

**9:20-10:00am**            **Keynote I**

**10:00-10:40am**        **Keynote II**

**10:40-11:10am**        **Morning Tea**

**11:10-12:30pm**        **PICom Session 1: Social Networks and Mobile Computing**

1. **Discovering Items with Potential Popularity on Social Media**, *Khushnood Abbas, Minsheng Shang, Xin Luo*
2. **Harnessing Smartphones as a Personal Informatics Tool Towards Self-Awareness and Behavior Improvement**, *Hania Aslam, Farhana Seemi, Hamid Mukhtar, Djamel Belaid*
3. **A Framework for Third Party Android Marketplaces to Identify Repackaged Apps**, *Nai-Wei Lo, Shau-Kang Lu, Yo-Hsuan Chuang*
4. **A Lightweight Trust Design for IoT Routing**, *David Airehrour, Jairo Gutierrez, Sayan Kumar Ray*

**12:30-1:30pm**            **Lunch**

**1:30-2:45pm**            **Big Data Techniques and Image Processing Under Cyber (BDTIPC Session 1)      Chair: Caiming Zhang**

1. **An Adaptive Interpolation Algorithm Based on the Nonsampled Contourlet Transform**, *Qinglan Fan, Yunfeng Zhang, Xiaohong Shen, Xunxiang Yao, Fangxun Bao*
2. **Saliency Detection Based on Multi-Scale Image Features**, *Chaoqun Zheng, Xiaozhi Zheng, Qiang Guo, Shuo Tian*
3. **Weakly-supervised Classification of Pulmonary Nodules Based on Shape Characters**, *Jingqi Song, Hui Liu, Fenghuan Geng and Caiming Zhang*
4. **Single Image Dehazing Method Under the Influence of Un-uniform Illumination**, *Wenhua Zhang, Shanshan Gao, Jing Chi, Yuanfeng Zhou*

**2:45-3:10pm**            **Afternoon Tea**

**3:10-4:50pm**            **Big Data Techniques and Image Processing Under Cyber (BDTIPC session 2)      Chair: Caiming Zhang**

1. **Noisy Problem on Discrete Linear Consensus Protocol in Networked Multi-agent Systems**, *Quansheng Dou, Jinjiang Li, Hui Fan, Yuehao Pan*

2. **ShapeNets: Image Representation Based on the Shape**, *Hui Fan, Tan Sun, Yan Zhang, Jinjiang Li*
3. **Causal Association Analysis Algorithm for MOOC Learning Behavior And Learning Effect**, *Hongyan Wang, Xingwei Hao, Wenjiang Jiao, Xingwu Jia*
4. **Construction of Learning Partners Based on Learning Interest**, *Mingliang Hou, Xingwei Hao, Shuo Tian*
5. **Single Image Super-Resolution Based on Self-similarity and Dictionary Neighborhood**, *Liang Guo, Guizhong Wang, Fan Zhang, Xuemei Li*

**4:50-5:30pm**      **Poster Session**

**5:00-7:30pm**      **Welcome reception**

**Day 1**                      **Monday, 8<sup>th</sup> August 2016**                      **Room 3**

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**8:30-9:20am**              **DASC/PICom/DataCom/CyberSciTech Opening**

**9:20-10:00am**            **Keynote I**

**10:00-10:40am**        **Keynote II**

**10:40-11:10am**        **Morning Tea**

**11:10-12:30pm**        **DASC Session 1: Cyber Security**

1. **Enhancing Windows Firewall Security Using Fuzzy Reasoning**, *Nitin Naik, Paul Jenkins*
2. **MalAware: Effective and Efficient Run-time Mobile Malware Detector**, *Jelena Milosevic, Alberto Ferrante, Mirosław Malek*
3. **uAuction: Analysis, Design and Implementation of a Secure Online Auction System**, *Nazia Majadi, Jarrod Trevathan, Neil Bergmann*
4. **Collision Attack Detection in Networked Systems**, *Md Zakirul Alam Bhuiyan, Jie Wu*

**12:30-1:30pm**            **Lunch**

**1:30-2:45pm**            **Cyber-Physical System for Sustainability (CPS4S)**

1. **Managing Energy Efficiency in the Cloud Computing Environment using SNMPv3**, *Asif Iqbal, Colin Pattinson, Ah-Lian Kor*
2. **Evaluation of ICT Environmental Impact for an SME**, *Michail Papanderou, Ah-Lian Kor, Colin Pattinson*
3. **Effective Green IT Strategy in a UK Higher Education Institute**, *Latifah M. AlHarbi\*, Ah-Lian Kor, Colin Pattinson*
4. **An Evaluation of the Impact of Remote Collaboration Tools on Corporate Sustainability**, *Jeannette Shaw, Ah-Lian Kor, Colin Pattinson*

**2:45-3:10pm**            **Afternoon Tea**

**3:10-4:50pm**            **Cyber Social Computing and Cyber-Enabled Applications (CSC&CEA)**

1. **Analysis and Modeling for Interaction with Mobility Based on Pi-Calculus**, *Yaya Liu, Jiulei Jiang*
2. **A Probabilistic Perspective Model for Recommendation Considering Long Tail Effect**, *Shuanghu Luo, Jun Xie*

3. **An Ontology Pattern for Emergency Event Modeling**, *Wei Liu, Ning Ding, Yue Tan, Yujia Zhang, Zongtian Liu*
4. **An Image Encryption Method Based on RSFPrLR and RSLPrFL Circulant Matrices**, *Xing Wu, Shuji Dai*
5. **Overlap Community Detection Based on Node Convergence Degree**, *Weimin Li, Shu Jiang, HuaiKou Miao, Xiaokong Zhou, Qun Jin*

**4:50-5:30pm**      **Poster Session**

**5:00-7:30pm**      **Welcome reception**

**Day 1**                      **Monday, 8<sup>th</sup> August 2016**                      **Room 4**

**7:00-8:30am**              **Registration**

**8:30-9:20am**              **DASC/PICom/DataCom/CyberSciTech Opening**

**9:20-10:00am**            **Keynote I**

**10:00-10:40am**        **Keynote II**

**10:40-11:10am**        **Morning Tea**

**11:10-12:30pm**        **CyberSciTech Tutorial 1 - Cybermatics: Cyber Science, Technology and Humanity for Cyber-enabled Worlds**

**12:30-1:30pm**            **Lunch**

**1:30-2:45pm**            **Cyber Security and Privacy with Network Log Analytics (CyberSPNLA)**        **Chair: Jiamou Liu**

1. *An Anonymous Taxi Dispatch and Mobile Payment System, Zijiang Zhang, Ange Tong, Liehuang Zhu, Mingxin Chen, Chen Xu*
2. *Intrusion Detection Based on IDBM, Yajun Liu, Xuan Zhang*
3. *A MapReduce-Based Framework for Analyzing Web Logs in Offline Streams, Ruoyu Chen, Yangsen Zhang, Rongrong Bi, Yuru Jiang, Yanhua Zhang*
4. *Measuring Structural Resilience Through a Carrier Network Model, Ziheng Wei, Jiamou Liu*

**2:45-3:10pm**            **Afternoon Tea**

**3:10-4:50pm**            **CyberSciTech Tutorial 2 - Designing Secure Architectures for Cyber-physical Systems Using Security Patterns and Reference Architectures**

**4:50-5:30pm**            **Poster Session**

**5:00-7:30pm**            **Welcome reception**



**Day 2                      Tuesday, 9<sup>th</sup> August 2016                      Room 1**

**8:00-8:30am              Registration**

**8:30-9:10am              Keynote III**

**9:10-9:50am              Keynote IV**

**9:50am-10:20am      Morning Tea**

**10:20-11:50pm      Panel Discussion**

**11:50-12:50pm      Lunch**

**12:50-2:50pm      DataCom Session 3: Big Data and Complex Applications -1**

1. **MSFS: Multiple Spatio-temporal Scales Traffic Forecasting in Mobile Cellular Network,** *Dandan Miao, Weijian Sun, Xiaowei Qin, Weidong Wang*
2. **Forecasting Crimes using Autoregressive Models,** *Eugenio Cesario, Charlie Catlett, Domenico Talia*
3. **Unsupervised Anomaly Detection Using Light Switches for Smart Nursing Homes,** *Chih-Wei Ho, Chun-Ting Chou, Yu-Chun Chien, Chia-Fu Lee*
4. **Interactive Healthcare Big Data Analytics Platform under Simulated Performance,** *Dillon Chrimes, Belaid Moad, Hamid Zamani, Mu-Hsing Kuo*
5. **A Comprehensive Validation Methodology for Trajectory Pattern Mining of GPS Data,** *Eugenio Cesario, Carmela Comito, Domenico Talia*
6. **32. Efficient On/Off-line Query Pre-processing for Telecom Social Streaming Data,** *Cheng Wu, Jigao Fu, Zhen Zhang, Chi Harold Liu*

**2:50-3:10pm              Afternoon tea**

**3:10-5:10pm              DataCom Session 4: Big Data and Complex Applications -2**

1. **Social Media Analysis on Evaluating Organisational Performance a Railway Service Management Context,** *Jie Yang, AHM Mehbub Anwar*
2. **Analysis of Human Autonomic Nervous Activity Based on Big Data Measurement Via SmartPhone,** *Makoto Komazawa, Kenichi Itao, Hiroyuki Kobayashi, Zhiwei Luo*
3. **Vehicle Classification in Acoustic Sensor Networks Based on Hybrid Dictionary Learning,** *Shuilin Guo, Rui Wang, Bin Liu, Qiyue Wei, Yanping Li*
4. **Sustainability Through Intelligent Scheduling of Electric Water Heaters in a Smart Grid,** *Marthinus J Booysen, Andrew H Cloete*
5. **A New Topology Time Division Beacon Construction Approach for IEEE802.15.4/ZigBee Cluster-tree Wireless Sensor Networks,** *Smain FEMMAM, Ikbal M. Benakila*

6. **Design and Partial Implementation of Health Care System for Disease Detection and Behavior Analysis by Using DM Techniques**, *Dingkun Li, Hyun Woo Park, Musa Ibrahim M. Ishag, Erdenebileg Batbaatar, Keun Ho Ryu*

**6:00-10:00pm      Banquet**

**Day 2**                      **Tuesday, 9<sup>th</sup> August 2016**                      **Room 2**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote III**

**9:10-9:50am**              **Keynote IV**

**9:50am-10:20am**      **Morning Tea**

**10:20-11:50pm**      **Panel Discussion**

**11:50-12:50pm**      **Lunch**

**12:50-2:50pm**      **PICom Session 2: Pervasive Networks and Communications**

1. **A Novel Network Selection Mechanism for Vehicle-to-Infrastructure Communication**, *Emmanuel Ndashimye, Nurul Sarkar, Sayan Kumar Ray*
2. **Architecture and Protocols for Inter-cell Device-to-Device Communication in 5G Networks**, *Ahmed Murkaz, Riaz Hussain, Faraz Hasan, Min Young Chung, Boon-Chong Seet, Peter Chong, Tariq Shah, Shahzad Malik*
3. **Assessing Device-Free Passive Localization with a Single Access Point**, *Debraj Basu, Faraz Hasan*
4. **Communities Evolution Analysis Based on Events in Dynamic Complex Network**, *Yao Hong, Cai Fu, Zhicun Fang, JieHua Zeng, Lansheng Han, DeLiang Xu*
5. **Early Stage Internet Traffic Identification Using Data Gravitation Based Classification**, *Lizhi Peng, Haibo Zhang, Bo Yang, Yuehui Chen, Xiaoqing Zhou*
6. **LPA: Learning Based Power Aware Communication Protocol in WBANs**, *Abbas Arghavani, Haibo Zhang, Zhiyi Huang*

**2:50-3:10pm**              **Afternoon tea**

**3:10-5:10pm**              **PICom Session 3: Pervasive Intelligence and Machine Learning**

1. **A Moment-based Classification Algorithm and Its Comparison to the K-nearest Neighbours for 2-dimensional Data**, *Krzysztof Pawelec, Artem Lenskiy*
2. **An Intelligent Defects Identification for Motors Using Partial Discharge Signals**, *Hong-Chan Chang, Cheng-Chien Kuo, Yuan-Sheng Li*
3. **Automated Scene Analysis by Image Feature Extraction**, *Syed Omer Gilani, Mohsin Jamil*
4. **ICFS: An Improved Fast Search and Find of Density Peaks Clustering Algorithm**, *Jing Gao, Liang Zhao, Zhennan Yang, Han Xu, Zhikui Chen, Peng Li*
5. **Proactive Intelligent System for Optimizing Traffic Signaling**, *Ramon Sanchez-Iborra, J. F. Ingles-Romero, Gines Domenech-Asensi, J. L. Moreno-Cegarra, Maria-Dolores Cano*

**6:00-10:00pm    Banquet**

**Day 2**                      **Tuesday, 9<sup>th</sup> August 2016**                      **Room 3**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote III**

**9:10-9:50am**              **Keynote IV**

**9:50am-10:20am**      **Morning Tea**

**10:20-11:50pm**      **Panel Discussion**

**11:50-12:50pm**      **Lunch**

**12:50-2:50pm**      **DASC Session 2: Security Issues over Cloud and Mobile Computing**

1. **A Model to Evaluate the Credibility of Service in Cloud Computing Environment**, *Bixin Li, Li Liao, Chao Li*
2. **Sensor-Cloud and Power Line Communication: Recent Developments and Integration**, *Chunsheng Zhu, Yinjia Huo, Victor C. M. Leung, Laurence T. Yang*
3. **Detecting Denial of Service Attacks in the Cloud**, *Raneel Kumar, Sunil Lal, Alok Sharma*
4. **Multi-stakeholders' Policy Enforcement for Android**, *Shahryar Khan Afridi;*
5. **Developing a Mobile System for Natural Language Grammar Acquisition**, *Marina Purgina, Maxim Mozgovoy, Vitaly Klyuev*
6. **Needleman-Wunsch and Smith-Waterman Algorithms for Identifying Viral Polymorphic Malware Variants**, *Vijay Naidu, Ajit Narayanan*

**2:50-3:10pm**              **Afternoon tea**

**3:10-5:10pm**              **DASC Session 3: Distributed Systems**

1. **Hierarchical Transactional Memory Protocol for Distributed Mixed-criticality Embedded Systems**, *Zaher Owda, Moisés Urbina, Roman Obermaisser, Mohammed Abuteir*
2. **ChainVoxel: A Data Structure for Scalable Distributed Collaborative Editing for 3D Models**, *Kengo Imae, Naohiro Hayashibara*
3. **Dependency Management in Component-based Building Automation Systems**, *Malte Burkert, Heiko Krumm*
4. **Distributed Strategic Learning for Building Network Embedded Coding to Achieve Reliable Event Notification**, *Christian Esposito, Aniello Castiglione, Francesco Palmieri, Florin Pop*
5. **Autocorrelation-based Detection of Infinite Loops at Runtime**, *Andreas Ibing, Julian Kirsch, Lorenz Panny*

**6:00-10:00pm    Banquet**

**Day 2**                      **Tuesday, 9<sup>th</sup> August 2016**                      **Room 4**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote III**

**9:10-9:50am**              **Keynote IV**

**9:50am-10:20am**      **Morning Tea**

**10:20-11:50pm**      **Panel Discussion**

**11:50-12:50pm**      **Lunch**

**12:50-2:50pm**      **CyberSciTech Session 1: Cyber science and applications**

**Chair: Neil Yen**

1. **Perspectives on Cyber Science and Technology for Cyberization and Cyber-enabled Worlds**, *Jianhua Ma, Raymond Choo, Hui-huang Hsu, Qun Jin, William Liu, Kevin Wang, Yufeng Wang, Xiaokang Zhou*
2. **A Visual Inspection System for Rail Corrugation Based on Local Frequency Features**, *Qingyong Li, Yunqiang Tan, Zhang Huayan, Shengwei Ren, Peng Dai and Weiyi Li*
3. **Surface Construction from Kinect RGB-D Stream**, *W.G.C.W. Kumara, Timothy K. Shih, Hui-Huang Hsu, Shih-Jung Wu, Stanislav Klimenko, Andrei Klimenko*
4. **Record Linkage Using the Combination of Twice Iterative SVM Training and Controllable Manual Review**, *Wang Fei, Hongbo Wang*
5. **Personal Data Analytics to Facilitate Cyber Individual Modeling**, *Xiaokang Zhou, Bo Wu, Qun Jin, Jianhua, Ma, Weimin Li, Neil Y. Yen*

**2:50-3:10pm**              **Afternoon tea**

**3:10-5:10pm**              **CyberSciTech Session 2: Cyber technology and connectivity**

**Chair: Boon-Chong Seet**

1. **Emerging Mobile Communication Technologies for Healthcare System in 5G Network**, *Sadia Din, Anand Paul, Seungmin Rho*
2. **Radio Resource Allocation for D2D-enabled Massive Machine Communication in the 5G Era**, *Huitao Yang, Boon-Chong Seet, Syed Faraz Hasan, Peter Han Joo Chong, Min Young Chung*
3. **Applying Virtual Coordination Anchor Node to Routing Mechanism in Wireless Sensor Networks**, *Ying-Hong Wang, Cheng-Han Tsai*
4. **Message Forwarding Strategies in Device-to-Device Based Mobile Social Networking in Proximity (MSNP)**, *Yufeng Wang, Jiabing Chen, Qun Jin, Jianhua Ma*

5. **A Scheme for Controlling Functionality of Mobile Device Using Specialized Codes**, *Su-Wan Park, Jeong Nyeo Kim*
6. **Software Defined Small Cell Networking Under Dynamic Traffic Patterns**, *Li Zhou, Jiao Zhang, Boon-Chong Seet, Lei Zuo, Xiping Hu, Jiaxun Li, Shan Wang, Jibo Wei*

**6:00-10:00pm      Banquet**



**Day 3**                      **Wednesday, 10<sup>th</sup> August 2016**                      **Room 1**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote V**

**9:10-9:40am**              **Keynote VI**

**9:40-10:10am**              **Keynote VII**

**10:10-10:40am**              **Morning Tea**

**10:40-12:20pm**      **DataCom Session 5: Big Data Science, Theorems and Analytics - 2**

1. **On the Role of Mobility and Network Coding on Multi-message Gossip in Random Geometric Graphs**, *Gang Wang, Zun Lin, Jie Wu*
2. **CDR Based Temporal-spatial Analysis of Anomalous Mobile Users**, *Zhen Wang, Sihai Zhang*
3. **Efficient Processing of Uncertain Data Using Dezert-Smarandache Theory: A Case Study**, *Hossein Jafari, Xiangfang Li, Lijun Qian*
4. **A New Algorithm of Geometric Mean for Solving High-order Fredholm Integro-differential Equations**, *Elayaraja Aruchunan, Nathnarong Khajohnsakumeth, Benchawan Wiwatanapataphee*
5. **Backbone Traffic Pattern Analysing Based on Joint Entropy**, *Jie Xu, Wei Ding, Jian Gon, XiaoDong Zang*

**12:20-1:20pm**              **Lunch**

**1:20-3:20pm**              **DataCom Session 6: Big Data Infrastructure, Clouds and HPC - 1**

1. **A Cloud-based Network Architecture for Big Data Services**, *Ming Zhao, Arun Kumar, G. G. Md. Nawaz Ali, Peter Han Joo Chong*
2. **QoS Oriented Embedding for Network Virtualization**, *Li Xu, Hui Li, Jingting Sun, Kai Pan, Guanghui Zhang*
3. **Logico-linguistic Semantic Representation of Documents**, *Sharyar Wani, Mohamed Ridza Wahiddin, Tengku Mohd. Tengku Sembok*
4. **Modeling of Resource Granularity and Utilization with Virtual Machine Splitting**, *Hojjat Baghban, Jerry Chou, Ching-Hsien Hsu, Yeh-Ching Chung*
5. **Information Pricing - A Utility based Pricing Mechanism**, *Divya Rao, Wee Keong Ng*
6. **Big Data Science Model for Data Analytics of Interesting Patterns**, *Carson Leung*

**3:20-3:40pm**      **Afternoon tea**

**3:40-5:30pm**      **DataCom Session 7: Big Data Infrastructure, Clouds and HPC – 2**

1. **Online Resource Management in Thermal and Energy Constrained Heterogeneous High Performance Computing**, *Mark A. Oxley, Sudeep Pasricha, Anthony A. Maciejewski, Howard Jay Siegel, Patrick J. Burns*
2. **Performance Optimization of the SSVD Collaborative Filtering Algorithm on MapReduce Architectures**, *ShiouCheng Yu, Quey-Liang Kao, Che-Rung Lee*
3. **expanCodes: Tailored LDPC codes for Big Data Storage**, *Yongmei Wei, Fengmin Chen*
4. **A Four-layer Architecture for Online and Historical Big Data Analytics**, *Julie Yixuan Zhu, Jialing Xu, Victor O.K. Li*
5. **FOG-engine: Towards Big Data Analytics in the Fog**, *Farahd Mehdipour, Bahman Javadi, Aniket Mahanti*
6. **Self-Operation of a Network**, *Haitao Tang, Kaj Stenber*

**5:30-6:00pm**      **Conference closing**

**Day 3**                      **Wednesday, 10<sup>th</sup> August 2016**                      **Room 2**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote V**

**9:10-9:40am**              **Keynote VI**

**9:40-10:10am**              **Keynote VII**

**10:10-10:40am**              **Morning Tea**

**10:40-12:20pm**      **PICom Session 4: Internet of Things, Cloud Computing and Privacy**

1. **Hybrid Backtracking Search Optimization Algorithm and K-Means for Clustering in Wireless Sensor Networks**, *Nurul Muazzah Abdul Latiff, Nik Noordini Nik Abdul Malik, Lhassane Idoumghar*
2. **A Two-Level Load Balancing Method with Dynamic Strategy for Cloud Computing**, *Yan-Wun Qiu, Jen-Ing Hwang; jihwang@csie.fju.edu.tw*
3. **A Simulated Annealing Combined Genetic Algorithm for Virtual Machine Migration in Cloud Datacenters**, *Yidong Li, Xiangjun Meng, Hairong Dong*
4. **A Usability Study on The Privacy Policy Visualization Model**, *Tahani Albalawi, Kambiz Ghazinour*
5. **Are Coarse-grained Overlays Ready for General Purpose Application Acceleration on FPGAs**, *Abhishek Jain, Douglas Maskell*

**12:20-1:20pm**              **Lunch**

**1:20-3:20pm**              **International Workshop on Big Data Programming and System Software (BDPSS Session 1)**

1. **VAIL: A Victim-Aware Cache Policy for Improving Lifetime of Hybrid Memory**, *Song Wu, Youchuang Jia, Fang Zhou, Xiang Gao, Hai Jin and Pingpeng Yuan*
2. **A Scalable Association-oriented Partitioning Approach for Streaming Graphs**, *Yun Hao, Buwen Wu, Pingpeng Yuan, Hai Jin and Xiaofeng Ding*
3. **ParameterFlow: A Novel Distributed Machine Learning Framework**, *Zhenshan Cao, Rentong Guo, Yu Zhang, Xiaofei Liao, Hai Jin, Feng Lu and Xuanhua Shi*
4. **Prediction of User Behavior with New Mobile Services**, *Yong Chen, Hai Jin, Chunjiang He, Juncheng Yao and Hanhua Chen*
5. **Fast Querying and Dynamic Processing for RDF Databases**, *Guang Yang, Pingpeng Yuan and Hai Jin*

**3:20-3:40pm**              **Afternoon tea**

**3:40-5:30pm      International Workshop on Big Data Programming and System Software (BDPSS Session 2) / International Workshop on Data Intensive Computing and Communications for Sustainable Development (DICCC4SD)**

1. **A Semantic-based Approach to Building Auxiliary System for Screen-Based Reading,** *Huizhong Zhong, Shaofeng Li, Feng Zhao, Hai Jin and Qin Zhang*
2. **Research About New Media Security Technology Base on Big Data Era,** *Zheng-Wu Lu*
3. **Design and Implementation of Hybrid Shingled Recording RAID System,** *Zheng-Wu Lu and Gang Zhou*
4. **Disaster Ehealth: Sustainability in the Extreme,** *Dave Parry\*, Tony Norris, Samaneh Madanian*
5. **CatchMe If You Can: Enable Sustainable Communications Using Internet of Movable Things,** *Ambreen Memon, William Liu, Adnan Al-Anbuky*

**5:30-6:00pm      Conference closing**

**Day 3**                      **Wednesday, 10<sup>th</sup> August 2016**                      **Room 3**

**8:00-8:30am**              **Registration**

**8:30-9:10am**              **Keynote V**

**9:10-9:40am**              **Keynote VI**

**9:40-10:10am**              **Keynote VII**

**10:10-10:40am**              **Morning Tea**

**10:40-12:20pm**              **DASC Session 4: Networks and IoTs**

1. **A Publish/Subscribe Protocol for Event-driven Communications in the Internet of Things**, *Christian Esposito, Aniello Castiglione, Francesco Palmieri, Massimo Ficco, Kim-Kwang Raymond Choo*
2. **A Discussion and Review of Network Steganography**, *Jun O Seo, Sathiamoorthy Manoharan, Aniket Mahanti*
3. **Design and Analysis of IoT Applications: A Model-Driven Approach**, *Bruno Costa, Paulo F. Pires, Flávia C. Delicato, Wei Li, Albert Y. Zomaya*
4. **Range Encoding-Based Network Verification in SDN**, *Yen-Lun Tseng, Guey-Yun Chang*
5. **OmPe-Fibo: An Efficient Forbidden Pattern Free CAC Design for NoCs**, *Zahra Shirmohammadi, Yassin Alivand, Fereshteh Mozafari, Seyed-Ghassem Miremadi*

**12:20-1:20pm**              **Lunch**

**1:20-3:20pm**              **Cyber Data Mining for Natural Language Processing (CDM4NLP)**

1. **Review of Research on Computer-games for Tibetan Chess**, *Xiali Li, Songting Deng, Xinyang Wang, Yongji Li, Licheng Wu, Junxian Duan*
2. **The Design and Implementation of a High-efficiency Distributed Web Crawler**, *Qiumei Pu, Hong Zhang*
3. **Ontology Modeling and Application of Multi-agent for Negotiation System**, *Qiumei Pu, Hong Zhang*
4. **A Preliminary Study of Plant Domain Ontology**, *Xiaoxu Li*

**3:20-3:40pm**              **Afternoon tea**

**3:40-5:30pm**              **The 2nd International Workshop on Social Computing in Health Informatics (Social Health 2016) / International Workshop**

## **on Emerging Dependable Computing System Technologies and Applications (EDCSTA 2016)**

1. **Tolerance-based Group Scoring Scheme Promotes Cooperation in Public Goods Game,** *Haiping Zhang, Gang Wang, Hongjun Qiu, Weitong Hu, Lanping Yu*
2. **An Improved Exponential Smoothing Model on Rental Trends Prediction of Public Bicycle Stations,** *Fei Lin, Linyao Zhang, Haitao Xu, Yong Sun*
3. **Effect of Different Migration Strategies on Evolution of Cooperation in Spatial Prisoner's Dilemma Game,** *Hong Ding, Xiangyu Chen, Benyun Shi, Yanming Ye, Yizhi Ren*
4. **Threat Modeling in Cyber-Physical Systems,** *Eduardo B. Fernandez*
5. **An Ontology-based Framework for Hybrid Cloud Resiliency Mechanism,** *Toshihiro Uchibayashi, Bernady O. Apduhan, Norio Shiratori*

**5:30-6:00pm      Conference closing**