**Conference Sessions**

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| **Session 1: Information Hiding I**  **14:00-15:20 July 29, 2016 Room 108, Meteorological Building**  **Session Chair: Ching-Nung Yang, National Dong Hwa University, Taiwan** | |
| **14:00-14:20** | **A Blind Image Watermarking Algorithm in the Combine Domain**  *Qingtang Su, Gang Wang, Xiaofeng Zhang, Guorui Sheng, Yujuan Sun* |
| **14:20-14:40** | **Reversible Contrast Enhancement**  *Zhenxing Qian,Xinpeng Zhang, Weiming Zhang, Yimin Wang* |
| **14:40-15:00** | **On Improving Homomorphic Encryption-based Reversible Data Hiding**  *Xiaotian Wu, Zhuoqian Liang, Bing Chen, and Tong Liu* |
| **15:00-15:20** | **Coverless Multi-Keyword Information Hiding Method**  *Yan Mu, Zhili Zhou, Ningsheng Zhao, Q.M. Jonathan Wu, Ching-Nung Yang* |
| **Session 2: Information Hiding II**  **15:35-16:55 July 29, 2016 Room 108, Meteorological Building**  **Session Chair: Wien Hong, Sun Yat-sen University, China** | |
| **15:35-15:55** | **Fingerprint Liveness Detection Adapted to Different Fingerprint Sensors Based on Multiscale Wavelet Transform and Rotation-Invarient Local Binary Pattern**  *Chengsheng Yuan, Xingming Sun* |
| **15:55-16:15** | **Reversible data hiding with low bit-rate growth in H.264/AVC compressed video by adaptive hybrid coding**  *Tian-Qi Wang, Hong-Xia Wang, Yue Li* |
| **16:15-16:35** | **An Information Hiding Algorithm for HEVC based on Differences of Intra Prediction Modes**  *Qi Sheng, Rangding Wang, Anshan Pei, Bin Wang* |
| **16:35-16:55** | **Improvement for Universal Steganalysis Based on SPAM and Feature Optimization**  *Lei Min, Yang Xue, Yang Yu, WangMian, Wang Cheng* |
| **Session 3: Cloud Computing I**  **14:00-15:20 July 29, 2016 Room 423, Meteorological Building**  **Session Chair: Zemin Ning, Wellcome Trust Sanger Institute, UK** | |
| **14:00-14:20** | **Multi-Objective Ant Colony Optimization Algorithm Based on Load Balance**  *Liwen Zhu, Ruichun Tang, Ye Tao, Meiling Ren and Lulu Xue* |
| **14:20-14:40** | **A Novel Spatio-temporal Data Storage and Index Method for ARM-based Hadoop Server**  *Lan Huang,Laipeng Han,Xueyi Yang,Wei Pang,Kangping Wang* |
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| **14:40-15:00** | **An Efficient Hierarchical Comparison Mechanism for Cloud-based Heterogeneous Product Lifecycle Management Systems**  *Mikayla Cohen, Yanzhen Qu* |
| **15:00-15:20** | **Automatic Classification of Cloud Service Based on Weighted Euclidean Distance**  *Yanqiu Lou, Yi Zhuang, Ying Huo* |
| **Session 4: Cloud Computing II**  **15:35-16:35 July 29, 2016 Room 423, Meteorological Building)**  **Session Chair: Yanzhen Qu, Colorado Technical University, USA** | |
| **15:35-15:55** | **A Conflict Prevention Scheduling Strategy for Shared-state Scheduling in Large Scale Cluster**  *Libo He , Zhenping Qiang , Lin Liu, Wei Zhou and Shaowen Yao* |
| **15:55-16:15** | **Design and Performance Comparison of Modular Multipliers Implemented on FPGA Platform**  *Khalid Javeed, Daniel Irwin, and Xiaojun Wang* |
| **16:15-16:35** | **Cloud-based Video Surveillance System using EFD-GMM for Object Detection**  *Ce Li, Jianchen Su, Baochang Zhang* |
| **16:35-16:55** | **Enhanced Edge Detection Technique for Satellite Images**  *Renu Gupta* |
| **Session 5: IoT Applications I**  **14:00-15:20 July 29, 2016 Room 814, Meteorological Building**  **Session Chair: Tetteh Justice Edem, Nanjing University of Information Science and Technology, China** | |
| **14:00-14:20** | **A Lifetime-Aware Network Maintenance Method for Wireless Sensor Networks**  *Long Cheng, Yan Wang, Hao Chu, Qilin Wan* |
| **14:20-14:40** | **An Efficient Task Assignment Mechanism for Crowdsensing Systems**  *Zhuan Shi, He Huang, Yu-E Sun, Xiaocan Wu, Fanzhang Li, Miaomiao Tian* |
| **14:40-15:00** | **FPAP: Fast Pre-distribution Authentication Protocol for V2I**  *Wei Guo, Yining Liu and Jing Wang* |
| **15:00-15:20** | **CACA-UAN：A Context-Aware Communication Approach Based on the Underwater Acoustic Sensor Network**  *Qi Liu, Xuedong Chen* |
| **Session 6: IoT Applications II**  **15:35-16:55 July 29, 2016 Room 814, Meteorological Building**  **Session Chair: Eric Wong, University of Texas at Dallas, USA** | |
| **15:35-15:55** | **Combating TNTL: Non-Technical Loss Fraud Targeting Time-based Pricing in Smart Grid**  *Wenlin Han, Yang Xiao* |
| **15:55-16:15** | **Social Influence Analysis Based on Modeling Interactions in Dynamic Social Networks: A Case Study**  *Liwei Huang,Yutao Ma,Yanbo Liu* |
| **16:15-16:35** | **Automated Vulnerability Modeling and Verification for Penetration Testing Using Petri Nets**  *Junchao Luan, Jian Wang, Mingfu Xue* |
| **16:35-16:55** | **Electric Power Communication Bandwidth Prediction Based on Adaptive Extreme Learning Machine**  *Song Wang, Li Di, Min Xia, Kai Hu, Ruidong Zhang* |
| **Session 7: IoTApplications III**  **14:00-15:20 July 29, 2016 Room 825, Meteorological Building**  **Session Chair: Chin-Feng Lai, National Chung Cheng University, Taiwan** | |
| **14:00-14:20** | **Narthil: Push the Limit of Cross Technology Coexistence for Interfered Preambles**  *Ping Li, Panlong Yang, Yubo Yan, Lei Shi, Maotian Zhang, Wanru Xu and Xunpeng Rao* |
| **14:20-14:40** | **Compressive sensing of piezoelectric sensor response signal for phased array structural health monitoring**  *Yajie Sun and Feihong Gu* |
| **14:40-15:00** | **VANET 2.0: Integrating Visible Light with Radio Frequency Communications for Safety Applications**  *Yao Ji, Peng Yue,Zongmin Cui* |
| **15:00-15:20** | **Phone Call Detection Based on Smartphone Sensor Data**  *Huiyu Sun and Suzanne McIntosh* |
| **Session 8: IoT Applications IV**  **15:35-16:55 July 29, 2016 Room 825, Meteorological Building**  **Session Chair: Yan Zhang, Simula Research Laboratory & University of Oslo, Norway** | |
| **15:35-15:55** | **An Optimization Strategy for Online Sequential Extreme Learning Machine based on PSO**  *Kai Hu,Liguo Weng,Zhaodi Zhou,Ruidong Zhang,Wenxian Jin,Chunyan Xu,Jingjing Lan* |
| **15:55-16:15** | **Temperature Error Correction Based on BP Neural Network in Meteorological Wireless Sensor Network**  *Baowei Wang, Xiaodu Gu, Li Ma and Shuangshuang Yan* |
| **16:15-16:35** | **An Energy-efficient Data Gathering Based Compressive Sensing**  *Ke-Ming Tang, Hao Yang, Xin Qiu, Lv-Qing Wu* |
| **16:35-16:55** | **Improving Data Credibility for Mobile Crowdsensing with Clustering and Logical Reasoning**  *Tongqing Zhou, Zhiping Cai, Yueyue Chen, and Ming Xu* |
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| **Session 9: Cloud Security I**  **14:00-15:20 July 29, 2016 Room C101, Reading Building**  **Session Chair: Xiaofeng Chen, Xidian University, China** | |
| **14:00-14:20** | **A privacy aware two-factor multi-server authentication and key agreement protocol for cloud computing**  *Qi Jiang, Binyan Li, Jianfeng Ma, Youliang Tian, Yuanyuan Yang* |
| **14:20-14:40** | **Another SPA Key Recovery Against Random Order Countermeasures for AES Key Expansion**  *Mengting Chen, Yang Li, Jian Wang* |
| **14:40-15:00** | **A Note on "IPad: ID-based public auditing for the outsourced data in the standard model"**  *Wenting Shen, Jia Yu, Hui Xia, Rong Hao* |
| **15:00-15:20** | **Supervised Nonlinear Latent Feature Extraction and Regularized Random Weights Neural Network Modeling for Intrusion Detection System**  *Jian Tang, Meiying Jia, Dong Li, Wen Yu* |
| **Session 10: Cloud Security II**  **15:35-16:55 July 29, 2016 Room C101, Reading Building**  **Session Chair: Xinyi Huang, Fujian Normal University, China** | |
| **15:35-15:55** | **A revocable certificateless signature scheme without pairing**  *Yinxia Sun, Futai Zhang, Limin Shen* |
| **15:55-16:15** | **Privacy Protection of Digital Speech Based on Homomorphic Encryption**  *Canghong Shi, Hongxia Wang, Qing Qian, Huan Wang* |
| **16:15-16:35** | **Two-factor authenticated key exchange protocol for wireless sensor networks: formal model and secure construction**  *Fushan Wei, Ruijie Zhang, Chuangui Ma* |
| **16:35-16:55** | **Outsourced Data Modification Algorithm with Assistance of Multi-Assistants in Cloud Computing**  *Jun Shen* |
| **Session 11: Multimedia Applications I**  **14:00-15:20 July 29, 2016 Room N314, Reading Building**  **Session Chair: Wei Pang, University of Aberdeen, UK** | |
| **14:00-14:20** | **SA-based Multimedia Conversion System for Multi-users Environment**  *Hsin-Hung Cho, Fan-Hsun Tseng, Timothy K. Shih, Li-Der Chou, and Han-Chieh Chao* |
| **14:20-14:40** | **Color Image Quality Assessment with Quaternion Moments**  *Wei Zhang, Bo Hu, Zhao Xu, and Leida Li* |
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| **14:40-15:00** | **Data Aggregation and Analysis：A fast algorithm of ECG recognition based on pattern matching**  *Miaomiao Zhang, Dechang PI* |
| **15:00-15:20** | **Spatial Descriptor Embedding for Near-Duplicate Image Retrieval**  *Yunlong Wang, Zhili Zhou, Defa Hu, Tao Wang* |
| **Session 12: Multimedia Applications II**  **15:35-16:55 July 29, 2016 Room N314, Reading Building**  **Session Chair: Chih-Hsien Hsia, Chinese Culture University, Taiwan** | |
| **15:35-15:55** | **Original Image Tracing with Image Relational Graph for Near-Duplicate Image Elimination**  *Fang Huang, Zhili Zhou, Tianliang Liu, Xiya Liu* |
| **15:55-16:15** | **Hierarchical Joint CNN-based Models for Fine-Grained Cars Recognition**  *Maolin Liu, Chengyue Yu, Hefei Ling , and Jie Lei* |
| **16:15-16:35** | **Towards Interest-based Group Recommendation for Cultural Resource Sharing**  *Jing Zhou, Weifeng Xie, and Chen Zhang* |
| **16:35-16:55** | **Region Based Trilateral Filter for Depth Video Coding**  *Dongyang Li, Chunyue Hu, Jinhui Duan , Lele Li, and Jianjun Lei* |
| **Session 13: Information Hiding III**  **14:00-15:20 July 30, 2016 Room 108, Meteorological Building**  **Session Chair: Gaobo Yang, Hunan University, China** | |
| **14:00-14:20** | **Coverless Image Steganography based on Histograms of Oriented Gradients-based Hashing Algorithm**  *Zhili Zhou, Ching-Nung Yang, Q.M. Jonathan Wu, Zhaoqing Pan* |
| **14:20-14:40** | **Optimizing Feature for JPEG Steganalysis via Gabor Filter and Co-occurrences Matrices**  *Bing Cao, Guorui Feng, and Zhaoxia Yin* |
| **14:40-15:00** | **Improved separable reversible data hiding in encrypted image based on neighborhood prediction**  *Shu Yan, Fan Chen, Hongjie He* |
| **15:00-15:20** | **Fragile Watermarking with Self-Recovery Capability via Absolute Moment Block Truncation Coding**  *Ping Ji, Chuan Qin, and Zhenjun Tang* |
| **Session 14: Information Hiding IV**  **15:30-16:30 July 30, 2016 Room 108, Meteorological Building**  **Session Chair: Zhaoxia Yin, Anhui University, China** | |
| **15:30-15:50** | **Schur Decomposition Based Robust Watermarking Algorithm in Contourlet Domain**  *Junxiang Wang, Ying Liu* |
| **15:50-16:10** | **Improved Uniform Embedding for Efficient JEPG Steganography**  *Yuanfeng Pan, Jiangqun Ni, Wenkang Su* |
| **16:10-16:30** | **A Tunable Bound of the Embedding Level for Reversible Data Hiding with Contrast Enhancement**  *Haishan Chen, Wien Hong, Jiangqun Ni, and Junying Yuan* |
| **Session 15: Information Hiding V**  **14:00-15:20 July 30, 2016 Room 423, Meteorological Building**  **Session Chair: Jiangqun Ni, Sun Yat-Sen University, China** | |
| **14:00-14:20** | **Coverless Text Information Hiding Method based on the Rank Map**  *Jianjun Zhang, Lucai Wang, Haijun Lin* |
| **14:20-14:40** | **Active Learning Based Named Entity Recognition and Its Application in Natural Language Coverless Information Hiding**  *Huiyu Sun, Ralph Grishman, and Yingchao Wang* |
| **14:40-15:00** | **Coverless Image Steganography Based on SIFT and BOF**  *Chengsheng Yuan, Zhihua Xia, Xingming Sun* |
| **15:00-15:20** | **A Phishing Webpage Detecting Algorithm using Webpage Noise and N-gram**  *Qiong Deng, Huajun Huang, Liangmin Pan, Shuang Pang, Jiaohua Qin* |
| **Session 16: Information Hiding VI**  **15:30-16:30 July 30, 2016 Room 423, Meteorological Building**  **Session Chair: Zhenxing Qian, Shanghai University, China** | |
| **15:30-15:50** | **Coverless Information Hiding Method Based on the Chinese Character Encoding**  *Xianyi Chen, Sheng Chen and Yulei Wu* |
| **15:50-16:10** | **A Construction Scheme of Steganographic Codes Based on Matrix Unwrapping**  *Weiwei Liu, Guangjie Liu, Jiangtao Zhai, and Yuewei Dai* |
| **16:10-16:30** | **A Technique of High Embedding Rate Text Steganography Based on Whole Poetry of Song Dynasty**  *Yanchen Liu,Jian Wang, Zhibin Wang,Qifeng Qu ,Shun Yu* |
| **Session 17: Multimedia Security and Forensics I**  **14:00-15:20 July 30, 2016 Room 814, Meteorological Building**  **Session Chair: Yong Yu, University of Electronic Science and Technology of China, China** | |
| **14:00-14:20** | **Palmprint Matching by Minutiae and Ridge Distance**  *Jiali Chen, Zhenhua Guo* |
| **14:20-14:40** | **Anomaly Detection Algorithm for Helicopter Rotor Based on STFT and SVDD**  *Yun He, Dechang Pi* |
| **14:40-15:00** | **A novel self-adaptive quantum steganography based on quantum image and quantum watermark**  *Zhiguo Qu, Huangxing He, Tao Li, Songya Ma* |
| **15:00-15:20** | **Rotation invariant local binary pattern for blind detection of copy-move forgery with affine transform**  *Pei Yang, Gaobo Yang, and Dengyong Zhang* |
| **Session 18: Multimedia Security and Forensics II**  **15:30-16:50 July 30, 2016 Room 814, Meteorological Building**  **Session Chair: Jinguang Han, Nanjing University of Finance & Economics, China** | |
| **15:30-15:50** | **An Efficient Passive Authentication Scheme for Copy-Move Forgery based on DCT**  *Huan Wang, Hongxia Wang, and Canghong Shi* |
| **15:50-16:10** | **Audio tampering detection based on quantization artifacts**  *Biaoli Tao, Rangding Wang, Diqun Yan, Chao Jin, Yanan Chen, Li Zhang* |
| **16:10-16:30** | **Improvement of Image Universal Blind Detection Based on Training Set Construction**  *Min Lei, Huaifeng Duan, Chunru Zhou, Huihua Wang, Yin Li* |
| **16:30-16:50** | **General virtual images construction using pixel scrambling for deformable object recognition**  *Zhao Yingnan, Xiangjian He, Zhang Hui, Zhao Xiaoping* |
| **Session 19: Multimedia Security and Forensics III**  **17:00-18:00 July 30, 2016 Room 814, Meteorological Building**  **Session Chair: Qiong Huang, South China Agricultural University, China** | |
| **17:00-17:20** | **An efficient forensic method based on high-speed corner detection technique and SIFT descriptor**  *Bin Yang, Honglei Guo* |
| **17:20-17:40** | **A Dynamic Signature Verification Method Using Global and Local Features on Mobile Phones**  *Zhihua Xia, Tianjiao Shi,, Xingming Sun and Neal N. Xiong* |
| **17:40-18:00** | **Analysis of Topic Evolution on News Comments Based on Word Vectors**  *Jianghao Lin, Yongmei Zhou, Aimin Yang, Jin Chen* |
| **Session 20: Cloud Security III**  **14:00-15:20 July 30, 2016 Room 825, Meteorological Building**  **Session Chair: Jin Li, Guangzhou University, China** | |
| **14:00-14:20** | **Location Privacy Protected Recommendation System in Mobileclould**  *Haiyan Guan, Hongyan Qian, and Yanchao Zhao* |
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| **14:20-14:40** | **An extended chaotic maps based authenticated key agreement protocol without using password**  *Xiong Li, Junguo Liao, and Wei Liang* |
| **14:40-15:00** | **A Privacy-Preserving Online Reverse Multi-Attributes Auction Scheme Based on Degree-Matching**  *MingfanMa, Jun Gao, Ning Lu, Wenbo Shi* |
| **15:00-15:20** | **TransPro: Mandatory sensitive information protection based on virtualization and encryption**  *Xue-Zhi Xie, Hu-Qiu Liu, Yu-Ping Wang* |
| **Session 21: Cloud Security IV**  **15:30-16:30 July 30, 2016 Room 825, Meteorological Building**  **Session Chair: Debiao He, Wuhan University, China** | |
| **15:30-15:50** | **Key recovery in public clouds: a survey on cross-VM side channel attacks**  *Stelvio Cimato, Ernesto Damiani, Silvia Mella, Ching-Nung Yang* |
| **15:50-16:10** | **An Outsourcing Data Storage Scheme Based on Digital Watermarking**  *Zhangjie Fu, Xinyue Cao and Neal N. Xiong* |
| **16:10-16:30** | **Distributed quantum computation assisted by remote Toffoli gate**  *Ming-Xing Luo, Hui-Ran Li* |
| **Session 22: Multimedia Security and Forensics IV**  **17:00-18:00 July 30, 2016 Room 825, Meteorological Building**  **Session Chair: Honggang Wang, University of Massachusetts Dartmouth, USA** | |
| **17:00-17:20** | **BIT RATE-BASED H.264 VIDEO COPY DETECTION**  *Jian Li, Yan Kong* |
| **17:20-17:40** | **A Secure JPEG image retrieval method under cloud environment**  *Wei Han, Yanyan Xu, and Jiaying Gong* |
| **17:40-18:00** | **Photon-Counting Double-Random-Phase Image Authentication in the Fresnel Domain**  *Faliu Yi* |
| **Session 23: IoT Applications V**  **14:00-15:20 July 30, 2016 Room C101, Reading Building**  **Session Chair: Zhifeng Bao, Royal Melbourne Institute of Technology University, Australia** | |
| **14:00-14:20** | **PTOM: Profit Concerning and Truthful Online Spectrum Double Auction Mechanism**  *Bing Chen, Tianqi Zhou, Ping Fu, Xiangping Zhai* |
| **14:20-14:40** | **Non-Technical Loss Fraud in Advanced Metering Infrastructure in Smart Grid**  *Wenlin Han,Yang Xiao* |
| **14:40-15:00** | **Compressive Sensing Based on Energy-Efficient Communication and Recovery Guarantee in WSNs**  *Ke-Ming Tang, Hao Yang, Qin Liu, Chang-Ke Wang, Xin Qiu* |
| **15:00-15:20** | **Energy-Efficient Data Gathering Rendezvous Algorithms with Mobile Sinks for Wireless Sensor Networks**  *Jian Zhang, Jian Tang, Tianbao Wang, Fei Chen* |
| **Session 24: IoT Applications VI**  **15:30-16:50 July 30, 2016 Room C101, Reading Building**  **Session Chair: Naixue Xiong, Georgia State University, USA** | |
| **15:30-15:50** | **The Optimal Trajectory Planning for UAV in UAV-aided Networks**  *Quan Wang, Xiangmao Chang* |
| **15:50-16:10** | **Wi-Play: Robust Human Activity Recognition for Somatosensory Game Using Wi-Fi Signals**  *Xiaoxiao Cao, Bing Chen, Yanchao Zhao* |
| **16:10-16:30** | **A Glance of Child's Play Privacy in Smart Toys**  *Patrick C. K. Hung, Farkhund Iqbal, Shih-Chia Huang, Mohammed Melaisi, Kevin Pang* |
| **16:30-16:50** | **An Amorphous 2-Dimensional Bar Code**  *Han Jin, Dong Wei, Yang Cheng Hao, Chen Jun Xiu, Shen Yu Min* |
| **Session 25: Optimization and Classification I**  **14:00-15:20 July 30, 2016 Room N314, Reading Building**  **Session Chair: Mohammad Mehedi Hassan, King Saud University, Saudi Arabia** | |
| **14:00-14:20** | **New Conjugate Gradient Algorithms based on new Conjugacy Condition**  *Gonglin Yuan and Gaohui Peng* |
| **14:20-14:40** | **LS-SVM-based prediction model of tread wear optimized by PSO-GA-LM**  *Sha Hua, Jiabin Yuan, and Weijie Ding* |
| **14:40-15:00** | **A Hybrid Firefly Algorithm for Continuous Optimization Problems**  *Wenjun Wang, Hui Wang, Hui Sun,, Xiang Yu,, Jia Zhao, Yun Wang, Yunhui Zhang, Jinyong Zheng, Yueping Lu, Qianya Chen, Chuanbo Han* |
| **15:00-15:20** | **A Particle Swarm Optimization with an Improved Updating Strategy**  *Zheng Fu, Haidong Hu, Chuangye Wang, Hao Gao* |
| **Session 26: Optimization and Classification II**  **15:30-16:50 July 30, 2016 Room N314, Reading Building**  **Session Chair: Kyei Baffour Boafoh, Nanjing University of Information Science and Technology, China** | |
| **15:30-15:50** | **A Manifold Learning Algorithm Based on Incremental Tangent Space Alignment**  *Chao Tan and Genlin Ji* |
| **15:50-16:10** | **Learning Based K-Dependence Bayesian Classifiers**  *Yuanxiang Xie, Huisi Zhou, Limin Wang, Jiangshan Guo, Yiming Wang* |
| **16:10-16:30** | **Scale InvariantKernelized Correlation Filter based on Gaussian Output**  *Xiangbo Su, Baochang Zhang, Linlin Yang, Zhigang Li, and Yun Yang* |
| **16:30-16:50** | **A novel Selective Ensemble Learning based on K-means and Negative Correlation**  *Liu Liu, Baosheng Wang, Bo Yu, and Qiuxi Zhong* |
| **Session 27: Optimization and Classification III**  **17:00-18:20 July 30, 2016 Room N314, Reading Building**  **(Session Chair: Bah Mohamed Jaward, Nanjing University of Information Science and Technology, China** | |
| **17:00-17:20** | **Real-time aircraft noise detection based on large-scale noise data**  *Weijie Ding, Jiabin Yuan, and Sha Hua* |
| **17:20-17:40** | **Sentiment Analysis of Chinese Text using Bidirectional LSTM with Word Embedding**  *Zheng Xiao, Pijun Liang* |
| **17:40-18:00** | **A Highly Efficient Human Activity Classication Method Using Mobile Data from Wearable Sensors**  *Lihuan Yuan, Qiang Liu, Mengchi Lu, Chengzhang Zhu, Sihang Zhou, Jianping Yin* |
| **18:00-18:20** | **Information System Risk Assessment Based on input- output Interdepended model**  *Tianmu Li and Jing Han* |