

IDEAL 2017 Technical Programme (Final)

Time Schedule	30 Oct. 2017, Monday
08:30h – 09:10h	Registration and authors' kits
09:10h - 09:30h	Opening
09:30h - 10:30h	Keynote Talk 1: Machine Learning and Classification Algorithms Hojjat Adeli, <i>Ohio State University</i>
10:30h - 11:00h	Coffee/Tea Break
11:00h - 12:30h	Technical Session M1: Machine Learning <ol style="list-style-type: none"> Learning Convolutional Ranking-score Function by Query Preference Regularization ID 3 (Guohui Zhang, Gaoyuan Liang, Weizhi Li, Jian Fang, Jingbin Wang, Yanyan Geng, and Jing-Yan Wang) Multi-output LSSVM-Based Forecasting Model for Mid-term Interval Load Optimized by SOA and Fresh Degree Function ID 13 (Huiting Zheng, Jiabin Yuan and Chang Zhao) A Potential-based Density Estimation Method for Clustering using Decision Graph ID 15 (Huanqian Yan, Yonggang Lu and Li Li) SibStCNN and TBCNN + kNN-TED: New Models over Tree Structures for Source Code Classification ID 26 (Anh Viet Phan, Minh Le Nguyen and Lam Thu Bui) Clustering by Searching Density Peaks via Local Standard Deviation ID 51 (Juanying Xie, Weiliang Jiang and Lijuan Ding) Convolutional Neural Networks for Unsupervised Anomaly Detection in Text Data ID 86 (Oleg Gorokhov, Mikhail Petrovskiy and Igor Mashechkin)
12:30h - 14:00h	Lunch
14:00h - 16:00h	Technical Session M2: Data Mining <ol style="list-style-type: none"> Heterogeneous Context-aware Recommendation Algorithm with Semi-supervised Tensor Factorization ID 42 (Guoyong Cai and Weidong Gu) Applying Random Forest to Drive Recommendation ID 83 (Qiang Lu, You Xu, Yixin Chen, Ruoyun Huang, and Ling Chen) Universum Discriminant Correlation Canonical Analysis ID 97 (Xiaohong Chen, Hujun Yin, Menglei Hu and Liping Wang) Finding Sentiment in Noise: Non-Linear Relationships between Sentiment and Financial Markets ID 100 (Zeyan Zhao, Stephen Kelly and Khurshid Ahmad) Fuzzy 2D-LDA Face recognition Based on Sub-image ID 58 (Xingrui Zhang, Yulian Zhu and Xiaohong Chen) Standardised Reputation Measurement ID 91 (Peter Mitic) Is a Reputation Time Series White Noise? ID 92 (Peter Mitic) Research on the Method of Splitting Large Class Diagram Based on Multilevel Partitioning

	ID 33 <i>(JinShuai Li, XiaoFei Zhao and BaoShan Sun)</i>
16:00h – 16:30h	<i>Coffee/Tea Break</i>
16:30h – 18:00h	Technical Session M3: Evolutionary Algorithms <ol style="list-style-type: none"> 1. An Ant Colony Random Walk Algorithm for Overlapping Community Detection ID 5 <i>(TianRen Ma and Zhengyou Xia)</i> 2. Evolving Technical Trading Strategies Using Genetic Algorithms: A Case About Pakistan Stock Exchange ID 61 <i>(Basit Tanvir Khan, Noman Javed, Ambreen Hanif and Muhammad Adil Raja)</i> 3. A Hybrid Evolutionary Approach with Adaptive Mutation and Crossover to Collaborative Learning Team Formation in Higher Education ID 63 <i>(Virginia Yannibelli and Analía Amandi)</i> 4. Exploring Elitism in Genetic Algorithms for License Plate Recognition with Michigan-style Classifiers ID 73 <i>(Dante Giovanni Sterpin Buitrago and Fernando Martínez Santa)</i> 5. Chaotic Brain Storm Optimization Algorithm ID 95 <i>(Eva Tuba, Edin Dolicanin and Milan Tuba)</i> 6. Object Detection with Proposals in High-Resolution Optical Remote Sensing Images ID 43 <i>(Huoping Ding, Qin hao Luo, Zhengxia Zou, Cuicui Guo and Zhenwei Shi)</i>
18:00h – 18:30h	<i>Free</i>
18:30h – 21:30h	Welcome Reception
Time Schedule	31 Oct. 2017, Tuesday
08:30h – 09:30h	Technical Session T1: Data Mining <ol style="list-style-type: none"> 1. Using The Multivariate Normal To Improve Random Projections ID 69 <i>(Keegan Kang)</i> 2. A Pay as You Use Resource Security Provision Approach Based on Data Graph, Information Graph and Knowledge Graph ID 80 <i>(Lixu Shao, Yucong Duan, Lizhen Cui, Quan Zou and Xiaobing Sun)</i> 3. Stochastic and no-stochastic feature selection ID 102 <i>(Antonio J. Tallón-Ballesteros, Luís Correia and Sung-Bae Cho)</i> 4. Understanding Matching Data Through Their Partial Components ID 103 <i>(Pablo Álvarez de Toledo, Fernando Núñez, Carlos Usabiaga and Antonio J. Tallón-Ballesteros)</i>
09:30h - 10:30h	Keynote Talk 2: Big Data Learning with Uncertainty XiZhao Wang, ShenZhen University
10:30h - 11:00h	<i>Coffee/Tea Break</i>
11:00h - 12:30h	Technical Session T2: Pattern Recognition <ol style="list-style-type: none"> 1. A Robust Object Tracking Method Based on CamShift for UAV videos ID 12 <i>(Chang Zhao, Jiabin Yuan and Huiting Zheng)</i> 2. Cost Sensitive Matrix Factorization for Face Recognition ID 28 <i>(Jianwu Wan, Ming Yang and Hongyuan Wang)</i> 3. Identification of Nonlinear System Based on Complex-valued Flexible Neural Network ID 30

	<p>(Lina Jia, Wei Zhang and Bin Yang)</p> <p>4. Ford Motorcar Identification from Single-camera Side-view Image Based on Convolutional Neural Network ID 34</p> <p>(Shui-Hua Wang, Wen-Juan Jia and Yu-Dong Zhang)</p> <p>5. Face Anti-spoofing Algorithm Based on Gray Level Co-occurrence Matrix and Dual Tree Complex Wavelet Transform ID 38</p> <p>(Xiaofeng Qu, Hengjian Li and Jiwen Dong)</p> <p>6. High-accuracy Deep Convolution Neural Network for Image Super-resolution ID 39</p> <p>(Wen'an Tan and Xiao Guo)</p> <p>7. Markov Random Field Based Convolutional Neural Networks for Image Classification ID 68</p> <p>(Yao Peng and Hujun Yin)</p>
12:30h - 14:00h	Lunch
14:00h - 15:00h	<p>Keynote Talk 3: Supporting Smart Exploratory Data Analysis</p> <p>Xiaoyang (Sean) Wang,</p> <p>Fudan University</p>
15:00h - 16:00h	<p>Technical Session T3: Optimization and Strategies</p> <p>1. Optimization of Grover's Algorithm Simulation Based on Cloud Computing ID16</p> <p>(Xuwei Tang, Juan Xu and Ye Zhou)</p> <p>2. Consensus-based Parallel Algorithm for Robust Convex Optimization with Scenario Approach in Colored Network ID 41</p> <p>(Fan Feng and Feilong Cao)</p> <p>3. The Theory of Modified Rings Game ID 67</p> <p>(Yushuang Wu, Yuhao Lin, Xiaoyu Chen and Xingguo Chen)</p> <p>4. An Investment Defined Transaction Processing towards Temporal and Spatial Optimization with Collaborative Storage and Computation Adaptation ID 81</p> <p>(Yucong Duan, Lixu Shao, Xiaobing Sun, Donghai Zhu, Xiaoxian Yang, and Abdelrahman Osman Elfaki)</p> <p>5. Solving the Bi-Criteria Max-Cut Problem with Different Neighborhood Combination Strategies ID 88</p> <p>(Li-Yuan Xue, Rong-Qiang Zeng, Zheng-Yin Hu and Yi Wen)</p>
16:00h – 16:30h	Coffee/Tea Break
16:30h – 18:00h	<p>Technical Session T4: Pattern Recognition</p> <p>1. Towards Spectral-Texture Approach to Hyperspectral Image Analysis for Plant Classification ID 46</p> <p>(Ali AlSuwaidi, Bruce Grieve and Hujun Yin)</p> <p>2. Artifact Removal Methods in Motor Imagery of EEG ID 50</p> <p>(Yanlong Zhu, Zhongyu Wang, Chenglong Dai and Dechang Pi)</p> <p>3. UK - Means Clustering for Uncertain Time Series Based on ULDTW Distance</p> <p>(Xiaoping Zhu, Zongmin Ma and Qijie Tang)</p> <p>4. Object Recognition Based on Dynamic Random Forest and SURF Descriptor ID 64</p> <p>(Khaoula Jayech and Mohamed Ali Mahjoub)</p> <p>5. Information Retrieval with Implicitly Temporal Queries ID 18</p> <p>(Jingjing Wang and Shengli Wu)</p> <p>6. Color Image Segmentation by Multilevel Thresholding Based on Harmony Search Algorithm ID 98</p> <p>(Viktor Tuba, Marko Beko and Milan Tuba)</p> <p>7. Trajectory Similarity-Based Prediction with Information Fusion for Remaining Useful Life</p>

	ID 48 <i>(Zhongyu Wang, Wang Tang and Dechang Pi)</i>
18:00h – 18:30h	<i>Free</i>
18:30h – 21:30h	Conference Dinner & Best Paper Awards
Time Schedule	1 Nov. 2017, Wednesday
08:30h – 09:30h	Technical Session W1: Social Network Analysis 1. Dynamic Community Detection Algorithm Based On Automatic Parameter Adjustment ID 4 <i>(Kai Lu, Xin Wang and Xiaoping Wang)</i> 2. A Community Detection Algorithm Based on Jaccard Similarity Label Propagation ID 11 <i>(Meng Wang, Xiaodong Cai, Yan Zeng and Xiaoxi Liang)</i> 3. A Community Detection Algorithm Based on Local Double Rings and Fireworks Algorithm ID 27 <i>(TianRen Ma and Zhengyou Xia)</i> 4. Predicting Personality Traits of Users in Social Networks ID 35 <i>(Zhili Ye, Yang Du and Li Zhao)</i>
09:30h - 10:30h	Tutorial: Language understanding with knowledge graphs Yanghua Xiao, Deqing Yang, Wanyun Cui Fudan University
10:30h - 11:00h	<i>Coffee/Tea Break</i>
11:00h - 12:30h	Technical Session W2: Intelligent Methods 1. Prediction Learning Effect by Learner's Behavior in MOOCs ID 90 <i>(Ye Tian, Yimin Wen, Xinhe Yi, Xi Yang and Yuqing Miao)</i> 2. Predicting Physical Activities from Accelerometer Readings in Spherical Coordinate System ID 9 <i>(Kittikawin Lehsan and Jakramate Bootkrajang)</i> 3. Cross-media Retrieval of Tourism Big Data Based on Deep Features and Topic Semantics ID 17 <i>(Yang Li, Junping Du, Zijian Lin and Lingfei Ye)</i> 4. On the Relations of Theoretical Foundations of Different Causal Inference Algorithms ID 20 <i>(Furui Liu and Laiwan Chan)</i>

	<p>5. Research of Dengue Fever Prediction in San Juan, Puerto Based on KNN Regression Model ID 29 (<i>Ying Jiang, Guohun Zhu, Zupeng Zhou and Ling Lin</i>)</p> <p>6. Interdisciplinary Approaches to Reduce Subjectivity in the System Dynamics Modeling Process ID 66 (<i>Jae Un Jung</i>)</p> <p>7. Linguistic Truth-Valued Multi-Attribute Decision Making Approach Based on TOPSIS ID 84 (<i>Yuanyuan Shi, Li Zou, Yingying Xu, Siyuan Luo and Jia Meng</i>)</p>
12:30h - 14:00h	Lunch
14:00h - 16:00h	<p>Technical Session W3: Clustering and Classification</p> <p>1. Co-clustering with Manifold and Double Sparse Representation ID 49 (<i>Fang Li and Sanyuan Zhang</i>)</p> <p>2. Cost-Sensitive Alternating Direction Method of Multipliers for Large-Scale Classification ID 56 (<i>Huihui Wang, Yinghuan Shi, Xingguo Chen and Yang Gao</i>)</p> <p>3. Generation of Reducts and Threshold Functions and its Networks for Classification ID 72 (<i>Naohiro Ishii, Ippei Torii, Kazunori Iwata, Kazuya Odagiri and Toyoshiro Nakashima</i>)</p> <p>4. A comparative study on Lagrange Ying-Yang alternation method in Gaussian mixture-based clustering ID 85 (<i>Weijian Long, Shikui Tu and Lei Xu</i>)</p> <p>5. An Improved Density Peak Clustering Algorithm ID 40 (<i>Jian Hou and Xu E</i>)</p> <p>6. Semi-supervised Regularized Discriminant Analysis for EEG-based BCI System ID 89 (<i>Yuhang Xin, Qiang Wu, Qibin Zhao and Qi Wu</i>)</p> <p>7. Sparse Representation Based on Discriminant Locality Preserving Dictionary Learning for Face Recognition ID 55 (<i>Guang Feng, Hengjian Li, Jiwen Dong and Xi Chen</i>)</p> <p>8. Face Attributes Retrieval by Multi-Label Contractive Hashing ID 47 (<i>Xuan Zhao, Xin Jin and Xiao Guo</i>)</p>
16:00h – 16:30h	Coffee/Tea Break
16:30h – 18:30h	Closing/Social Tour