Technical Program

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,** *Ohio State University*
10:30h - 11:00h	*Coffee/Tea Break*
11:00h - 12:30h	**Technical Session M1: Machine Learning** 1. 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*） 2. 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*） 3. A Potential-based Density Estimation Method for Clustering using Decision Graph **ID 15** (*Huanqian Yan, Yonggang Lu and Li Li*) 4. 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*） 5. Clustering by Searching Density Peaks via Local Standard Deviation **ID 51** (*Juanying Xie, Weiliang Jiang and Lijuan Ding*) 6. 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** 1. Heterogeneous Context-aware Recommendation Algorithm with Semi-supervised Tensor Factorization **ID 42** （*Guoyong Cai and Weidong Gu*） 2. Applying Random Forest to Drive Recommendation **ID 83** （*Qiang Lu, You Xu, Yixin Chen, Ruoyun Huang, and Ling Chen*） 3. Universum Discriminant Correlation Canonical Analysis **ID 97** （*Xiaohong Chen, Hujun Yin, Menglei Hu and Liping Wang*） 4. Finding Sentiment in Noise: Non-Linear Relationships between Sentiment and Financial Markets **ID 100** （*Zeyan Zhao, Stephen Kelly and Khurshid Ahmad*） 5. Prediction Learning Effect by Learner's Behavior in MOOCs **ID 90** （*Ye Tian, Yimin Wen, Xinhe Yi, Xi Yang and Yuqing Miao*） 6. Standardised Reputation Measurement **ID 91**

	(Peter Mitic)
	7. Is a Reputation Time Series White Noise? **ID 92**
	(Peter Mitic)
	8. Markov Random Field Based Convolutional Neural Networks for Image Classification **ID 68**
	（*Yao Peng and Hujun Yin*）
16:00h – 16:30h	*Coffee/Tea Break*

16:30h – 18:00h	**Technical Session M3: Evolutionary Algorithms**
	1. An Ant Colony Random Walk Algorithm for Overlapping Community Detection **ID 5**
	  （*TianRen Ma and Zhengyou Xia*）
	2. Evolving Technical Trading Strategies Using Genetic Algorithms: A Case About Pakistan Stock Exchange **ID 61**
	  （*Basit Tanvir Khan, Noman Javed, Ambreen Hanif and Muhammad Adil Raja*）
	3. A Hybrid Evolutionary Approach with Adaptive Mutation and Crossover to Collaborative Learning Team Formation in Higher Education **ID 63**
	  （*Virginia Yannibelli and Analía Amandi*）
	4. Exploring Elitism in Genetic Algorithms for License Plate Recognition with Michigan-style Classifiers **ID 73**
	  (*Dante Giovanni Sterpin Buitrago and Fernando Martínez Santa*)
	5. Chaotic Brain Storm Optimization Algorithm **ID 95**
	  (*Eva Tuba, Edin Dolicanin and Milan Tuba*)
	6. Object Detection with Proposals in High-Resolution Optical Remote Sensing Images **ID 43**
	  (*Huoping Ding, Qinhao Luo, Zhengxia Zou, Cuicui Guo and Zhenwei Shi*)

18:00h – 18:30h	*Free*
18:30h – 21:30h	**Welcome Reception**
Time Schedule	**31 Oct. 2017, Tuesday**

08:30h – 09:30h	**Technical Session T1: Data Mining**
	1. Using The Multivariate Normal To Improve Random Projections **ID 69**
	  (Keegan Kang)
	2. A Pay as You Use Resource Security Provision Approach Based on Data Graph, Information Graph and Knowledge Graph **ID 80**
	  (Lixu Shao, Yucong Duan, Lizhen Cui, Quan Zou and Xiaobing Sun)
	3. Stochastic and no-stochastic feature selection **ID 102**
	  （*Antonio J. Tallón-Ballesteros, Luís Correia and Sung-Bae Cho*）
	4. Understanding Matching Data Through Their Partial Components **ID 103**
	  (Pablo Álvarez de Toledo, Fernando Núñez, Carlos Usabiaga and Antonio J. Tallón-Ballesteros)

09:30h - 10:30h	**Keynote Talk 2: Big Data Learning with Uncertainty** **XiZhao Wang,** ***ShenZhen University***
10:30h - 11:00h	*Coffee/Tea Break*

11:00h - 12:30h	**Technical Session T2: Pattern Recognition** 1. A Robust Object Tracking Method Based on CamShift for UAV videos **ID 12** （*Chang Zhao, Jiabin Yuan and Huiting Zheng*） 2. Cost Sensitive Matrix Factorization for Face Recognition **ID 28** （*Jianwu Wan, Ming Yang and Hongyuan Wang*） 3. Identification of Nonlinear System Based on Complex-valued Flexible Neural Network **ID 30** （*Lina Jia, Wei Zhang and Bin Yang*） 4. Ford Motorcar Identification from Single-camera Side-view Image Based on Convolutional Neural Network **ID 34** （*Shui-Hua Wang, Wen-Juan Jia and Yu-Dong Zhang*） 5. Face Anti-spoofing Algorithm Based on Gray Level Co-occurrence Matrix and Dual Tree Complex Wavelet Transform **ID 38** （*Xiaofeng Qu, Hengjian Li and Jiwen Dong*） 6. High-accuracy Deep Convolution Neural Network for Image Super-resolution **ID 39** （*Wen'an Tan and Xiao Guo*）
12:30h - 14:00h	*Lunch*
14:00h - 15:00h	**Keynote Talk 3: Supporting Smart Exploratory Data Analysis** **Xiaoyang (Sean) Wang,** *Fudan University*
15:00h - 16:00h	**Technical Session T3: Optimization and Strategies** 1. Optimization of Grover's Algorithm Simulation Based on Cloud Computing **ID16** （*Xuwei Tang, Juan Xu and Ye Zhou*） 2. Consensus-based Parallel Algorithm for Robust Convex Optimization with Scenario Approach in Colored Network **ID 41** （*Fan Feng and Feilong Cao*) 3. The Theory of Modified Rings Game **ID 67** （*Yushuang Wu, Yuhao Lin, Xiaoyu Chen and Xingguo Chen*） 4. An Investment Defined Transaction Processing towards Temporal and Spatial Optimization with Collaborative Storage and Computation Adaptation **ID 81** （*Yucong Duan, Lixu Shao, Xiaobing Sun, Donghai Zhu, Xiaoxian Yang, and Abdelrahman Osman Elfaki*） 5. Solving the Bi-Criteria Max-Cut Problem with Different Neighborhood Combination Strategies **ID 88** （*Li-Yuan Xue, Rong-Qiang Zeng, Zheng-Yin Hu and Yi Wen*）
16:00h – 16:30h	*Coffee/Tea Break*

16:30h – 18:00h	**Technical Session T4: Pattern Recognition** 1. Towards Spectral-Texture Approach to Hyperspectral Image Analysis for Plant Classification **ID 46** *(Ali AlSuwaidi, Bruce Grieve and Hujun Yin)* 2. Artifact Removal Methods in Motor Imagery of EEG **ID 50** （*Yanlong Zhu, Zhongyu Wang, Chenglong Dai and Dechang Pi*） 3. Fuzzy 2D-LDA Face recognition Based on Sub-image **ID 58** （*Xingrui Zhang, Yulian Zhu and Xiaohong Chen*） 4. Object Recognition Based on Dynamic Random Forest and SURF Descriptor **ID 64** （*Khaoula Jayech and Mohamed Ali Mahjoub*） 5. Information Retrieval with Implicitly Temporal Queries **ID 18** (*Jingjing Wang and Shengli Wu*) 6. Color Image Segmentation by Multilevel Thresholding Based on Harmony Search Algorithm **ID 98** (*Viktor Tuba, Marko Beko and Milan Tuba*) 7. Trajectory Similarity-Based Prediction with Information Fusion for Remaining Useful Life **ID 48** (*Zhongyu Wang, Wang Tang and Dechang Pi*)
18:00h – 18:30h	*Free*
18:30h – 21:30h	**Conference Dinner & Best Paper Awards**
Time Schedule	**1 Nov. 2017, Wensday**
08:30h – 09:30h	**Technical Session W1: Social Network Analysis** 1. Dynamic Community Detection Algorithm Based On Automatic Parameter Adjustment **ID 4** （*Kai Lu, Xin Wang and Xiaoping Wang*） 2. A Community Detection Algorithm Based on Jaccard Similarity Label Propagation **ID 11** （*Meng Wang, Xiaodong Cai, Yan Zeng and Xiaoxi Liang*） 3. A Community Detection Algorithm Based on Local Double Rings and Fireworks Algorithm **ID 27** （*TianRen Ma and Zhengyou Xia*） 4. Predicting Personality Traits of Users in Social Networks **ID 35** （*Zhili Ye, Yang Du and Li Zhao*）
09:30h - 10:30h	Tutorial: Language understanding with knowledge graphs **Yanghua Xiao, Deqing Yang, Wanyun Cui** **Fudan University**

10:30h - 11:00h	*Coffee/Tea Break*
11:00h - 12:30h	**Technical Session W2: Intelligent Methods** 1. UK - Means Clustering for Uncertain Time Series Based on ULDTW Distance **ID 7** （*Xiaoping Zhu, Zongmin Ma and Qijie Tang*） 2. Predicting Physical Activities from Accelerometer Readings in Spherical Coordinate System **ID 9** （*Kittikawin Lehsan and Jakramate Bootkrajang*） 3. Cross-media Retrieval of Tourism Big Data Based on Deep Features and Topic Semantics **ID 17** （*Yang Li, Junping Du, Zijian Lin and Lingfei Ye*） 4. On the Relations of Theoretical Foundations of Different Causal Inference Algorithms **ID 20** （*Furui Liu and Laiwan Chan*） 5. Research of Dengue Fever Prediction in San Juan, Puerto Based on KNN Regression Model **ID 29** （*Ying Jiang, Guohun Zhu, Zupeng Zhou and Ling Lin*） 6. Interdisciplinary Approaches to Reduce Subjectivity in the System Dynamics Modeling Process **ID 66** （*Jae Un Jung*） 7. Linguistic Truth-Valued Multi-Attribute Decision Making Approach Based on TOPSIS **ID 84** （*Yuanyuan Shi, Li Zou, Yingying Xu, Siyuan Luo and Jia Meng*）
12:30h - 14:00h	*Lunch*
14:00h - 16:00h	**Technical Session W3: Clustering and Classification** 1. Co-clustering with Manifold and Double Sparse Representation **ID 49** (*Fang Li and Sanyuan Zhang*) 2. Cost-Sensitive Alternating Direction Method of Multipliers for Large-Scale Classification **ID 56** (*Huihui Wang, Yinghuan Shi, Xingguo Chen and Yang Gao*) 3. Generation of Reducts and Threshold Functions and its Networks for Classification **ID 72** (*Naohiro Ishii, Ippei Torii, Kazunori Iwata, Kazuya Odagiri and Toyoshiro Nakashima*) 4. A comparative study on Lagrange Ying-Yang alternation method in Gaussian mixture-based clustering **ID 85** (*Weijian Long, Shikui Tu and Lei Xu*) 5. An Improved Density Peak Clustering Algorithm **ID 40** （*Jian Hou and Xu E*） 6. Semi-supervised Regularized Discriminant Analysis for EEG-based BCI System **ID 89** (*Yuhang Xin, Qiang Wu, Qibin Zhao and Qi Wu*) 7. Sparse Representation Based on Discriminant Locality Preserving Dictionary Learning for Face Recognition **ID 55** (*Guang Feng, Hengjian Li, Jiwen Dong and Xi Chen*) 8. Face Attributes Retrieval by Multi-Label Contractive Hashing **ID 47** (*Xuan Zhao, Xin Jin and Xiao Guo*)
16:00h – 16:30h	*Coffee/Tea Break*

16:30h – 18:30h	**Closing/Social Tour**