



# The Tenth International Conference on Advanced Computational Intelligence

**(ICACI 2018)**

**Programme**

**Xiamen, Fujian, China**

**March 28-31 2018**





PROGRAM-AT-A-GLANCE

	March 28		March 29		March 30		March 31	
8:00-9:30	Tutorial 1 (M)	8:00-8:30	Opening Ceremony& Group Photo (M)	8:00-9:00	Panel Session (M)	8:00-9:15	Oral-31-1 (G)	
9:30-10:00	Tea break	8:30-9:30	Keynote 1 (M)	9:00-9:30	Tea Break	9:15-9:45	Tea Break	
10:00-11:30	Tutorial 2 (M)	9:30-10:00	Tea break	9:30-12:00	Oral-30-1 (G)	Oral-30-2 (Q)	International Workshop on Benchmarking of Computational Intelligence Algorithms (G)	
11:30-14:00	Lunch	10:00-11:00	Keynote 2 (M)	12:00-13:30	Lunch		12:00	Lunch
				12:45-13:30	Poster Session 2 (L-Q2)			
14:00-15:30	Tutorial 3 (M)	11:00-12:00	Keynote 3 (M)	13:30-15:30	Oral-30-3 (G)	Oral-30-4 (Q)		
15:30-16:00	Tea Break	12:00-13:30	Lunch	15:30-15:45	Tea Break			
16:00-17:30	Tutorial 4 (M)	12:45-13:30	Poster Seesion 1 (L-Q2)					
		13:30-15:30	Oral-29-1 (G)	Oral-29-2 (Q)	Oral-29-3 (L)	15:45-17:15	Oral-30-5 (G)	Oral-30-6 (Q)
		15:30-15:45	Tea break					
		15:45-17:45	Oral-29-4 (G)	Oral-29-5 (Q)	Oral-29-6 (L)	18:00	Dinner	
		18:30-20:30	Award Banquet (M)					

\*M: Ming-Xiao (明宵厅) ; L-Q2 : Li-Quan 2(礼泉 2厅) ; L : Li-Quan (礼泉 1厅)

G: Guang-Yi (广益厅) ;Q: Qiong-Lin(琼林厅)

**March, 28 2018**  
**Tutorials**  
**Ming-Xiao (明宵厅)**

8:00-9:30	<b>Prof. Yew Soon Ong</b> , FIEEE, <b>Topic:</b> Transfer Optimization: Because Experience is the Best Teacher <b>Chair :</b> Prof. Gary Yen
9:30-10:00	<b>Coffee break</b>
10:00-11:30	<b>Prof. Hisao Ishibuchi</b> , FIEEE, <b>Topic:</b> Evolutionary Many-Objective Optimization: Difficulties and Future Research Directions <b>Chair:</b> Prof. Zeng-Guang Hou
11:30-14:00	<b>Lunch break</b>
14:00-15:30	<b>Prof. Yaochu Jin</b> , FIEEE, <b>Topic:</b> Integration machine learning with evolutionary computation for data-driven optimization <b>Chair:</b> Prof. Gary Yen
15:30-16:00	<b>Coffee break</b>
16:00-17:30	<b>Prof. Haibo He</b> , FIEEE, <b>Topic:</b> Imbalanced Learning in Big Data <b>Chair:</b> Prof. Zeng-Guang Hou
	<b>Not serving dinner that day</b>

<b>March, 29 2018</b>		
8:00-8:30	Open Ceremony & Group Photo <b>Chair:</b> Prof. Gary Yen	
8:30-9:30	<b>Prof. Zhi-Hua Zhou</b> , FIEEE, <b>Topic:</b> Deep Forest: An exploration to non-NN style deep learning <b>Chair:</b> Prof. Gary Yen	<b>Ming-Xiao (明宵厅)</b>
9:30-10:00	<b>Coffee break</b>	
10:00-11:00	<b>Prof. Kay Chen Tan</b> , FIEEE, <b>Topic:</b> Applications of Computational Intelligence in Condition-Based Maintenance <b>Chair:</b> Prof. Zeng-Guang Hou	<b>Ming-Xiao (明宵厅)</b>
11:00-12:00	<b>Prof. Jun Wang</b> , FIEEE, <b>Topic:</b> Collaborative Neurodynamic Optimization: Biologically and Socially Plausible Approaches to Distributed, Global and Multiple-objective Optimization <b>Chair:</b> Prof. Gary Yen	<b>Ming-Xiao (明宵厅)</b>

12:00-13:30	<b>Lunch break</b>
-------------	--------------------

<b>POSTERS</b>			
March, 29 12:45-13:30	Paper ID	Poster Session 1 <b>Chair : Dr. Zhenan He</b>	Li-Quan 2 (礼泉 2 厅)
	2	Ying Zhao, Xiulin Geng, Qi Li and Guangqi Jiang	Recognition of Virtual Maze Scene under Simulated Prosthetic Vision
	11	Lin Bie, Rui Zhang and Zhi Teng Wang	Quantum Genetics Clustering Algorithm Based on High - dimensional And Multi - chain Coding Scheme
	14	Liang Wang and Gang Wu	GPU CUDA Accelerated Video Inpainting using Synthetic Algorithms
	20	Miao Ma, Xidan Xu, Jie Wu and Min Guo	Design and Analyze the Structure based on Deep Belief Network for

		Gesture Recognition
37	Ruiye Jiang, Tao Chao, Songyan Wang and Ming Yang	Order Whale Optimization Algorithm in Rendezvous Orbit Design
45	Zuofeng Zhou, Yingchun Fan, Huimin Huang, Guoliang Hu, Jianzhong Cao and Hongtao Yang	Key Technology Research on Monocular Vision Pose Measurement under Complex Background
47	Qitang Sun, Lujuan Dang, Wanli Wang and Shiyuan Wang	Kernel Least Mean Square Algorithm With Mixed Kernel
52	Yongsheng Zhang, Lin Xiao, Bolin Liao, Lei Ding and Rongbo Lu	Solving Quadratic Minimization Problem by Finite-Time Recurrent Neural Network Using Two Different Nonlinear Activation Functions
57	Yaxian Liu and Hui Lu	Outlier Detection Algorithm based on SOM Neural Network for Spatial Series Dataset
58	Hayder F.N. Al-Shuka, Rui Song and Chao Ding	On High-Level Control of Power-Augmentation Lower Extremity Exoskeletons: Human Walking Intention
60	Guang Huang, Dong Wang, Shihui Guo, Xiaoying Chen and Minghong Liao	A Novel Generated Method for High Quality Images
74	Fei Zhang and Yan Piao	Design of Restoration Method Based on Compressed Sensing and TwIST Algorithm
76	Tiantian Yang, Jie Shao, Yongliang Chen and Yihe Zhao	Parameter Estimation of Multi Component LFM Signals Based on Nonlinear Mode Decomposition and FrFT
78	Nan Ding, Ning Ye, Haiping Huang, Ruchuan Wang and Reza Malekian	Speech Emotion Features Selection Based on BBO-SVM
79	Cailong Li, Ning Ye, Haiping Huang, Ruchuan Wang and Reza Malekian	Emotion Recognition of Human Physiological Signals based on Recursive Quantitative Analysis
80	Pai-Song Chiang and Chiang-Ju Chien	Judging the Abnormal Track of Large Number of Boats by Using Radar Electronic Parameters
83	Jiang Mingyang and Zhili Pei	Research on Text Feature Clustering Based on Improved Parallel Genetic Algorithm
84	Dongqing Zhang and Zhaoxia Guo	Vehicle Routing Problem with Stochastic Time- and Space-Dependent Travel Times
90	Lu Jiang and Yan Piao	Multi-viewpoint Image Array Virtual Viewpoint Rapid Generation Algorithm Based on Image Layering
99	Hu Chen and Shuming Chen	Fast Automatic Generation of Efficient Custom Instructions for Application-Aware Computing
100	Dingan Liao and Hu Lu	Classify Autism and Control Based

		on Deep Learning and Community Structure on Resting-state fMRI
102	Yiting Jia, Donglai Zhang, Tiejai Li and Zicai Wang	Design and Analysis of a Hardware-efficient Compressed Sensing Architecture for Data Compression in Power Quality Data Acquisition
106	Wenyi Jiang, Shihui Guo, Qingqi Hong and Minghong Liao	Space-time Constrained Optimization for Deep Locomotion Controller
112	Yueyue Shi, Xiaojun Wang and Qiang Zhang	The Constrained Optimization Extreme Learning Machine Based on the Hybrid Loss Function for Regression
118	Xingnan Wen, Wen Han and Sitian Qin	Recurrent Neural Network for Complex-Variable Pseudoconvex Optimization with Equality Constraints
124	Longmei Li, Hao Chen, Jun Li, Ning Jing and Michael Emmerich	Integrating region preferences in Multiobjective Evolutionary Algorithms Based on Decomposition
125	Zeyu Yang, Haidong Hu and Hao Gao	Artificial Bee Colony Algorithm Based On Self-Adaptive Greedy Strategy
127	Kai Huang, Di Zhou, Wen Xu, Yingna Cong, Wei Wang and Zhiguo Que	Distributed Apriori on Cloud Platform without Exposing Individual Transaction Data
139	Ce Li, Yachao Zhang and Yanyun Qu	Object Detection Based on Deep Learning of Small Samples
145	Haiyong Dong, Qingfan Gu, Guoqing Wang, Zhengjun Zhai and Yanhong Lu	Availability Analysis of Electronic Flight Instrument System based on Dynamic Fault Tree
39	Rui Zhou and Shiji Song	Optimal Automatic Train Operation Via Deep Deterministic Policy Learning

March, 29 13:30-15:30	Paper ID	Oral-29-1 Chair:	Guang-Yi (广益厅)
13:30 -13:45	5	Bin Liu, Shi Cheng and Yuhui Shi	Improving Estimation of Distribution Algorithms with Heavy-Tailed Student's t Distributions
13:45-14:00	15	Chao Sun, Ling Yang, Li Chen, Jiliang Zhang and Rong Yang	Blind Equalization of Multilevel Signals via Support Vector Regression
14:00-14:15	16	Rong Yang, Ling Yang, Jiliang Zhang, Chao Sun, Wensheng Cong and Shiqing Zhu	Blind equalization of QAM signals via extreme learning machine
14:15-14:30	40	Haifeng Hu, Xiangfeng Xu and	Distance Metric Learning for Semantic Segmentation based

		Jiansheng Wu	Graph Hashing
14:30-14:45	30	Xiaolan Liu, Jiao Liu, Zhaoming Kong and Xiaowei Yang	Incremental Sparse Linear Regression Algorithms for Face Recognition
14:45-15:00	35	Zhijiao Xiao, Shaoyang Zhou and Meiyuan Cao	A Flower Image Retrieval Method Based on Memetic Feature Selection Algorithm
15:00-15:15	42	Xiayang Chen, Chaojing Tang, Yi Liu and Lei Zhang	Improved Wolf Pack Algorithm with Differential Evolution for Global Numerical Optimization
15:15-15:30	44	Kezhi Li and Shuang Cong	A Review of Image Processing Algorithms in Electrical Capacitance Tomography
March, 29 13:30-15:30		<b>Oral-29-2 Chair:</b>	<b>Qiong-Lin(琼林厅)</b>
13:30 -13:45	27	Yun Jiang, Jize Xiao, Xi Liu and Jinquan Hou	A Removing Redundancy Restricted Boltzmann Machine
13:45-14:00	91	Juan Mo, Lei Zhang and Yangqin Feng	A Multi-level Context Fusion Network for Exudate Segmentation in Retinal Images
14:00-14:15	121	Xiaoming Sun, Shuzhi Ge and Qing Xu	Neural Network Based Adaptive Region Tracking Control for a Swarm of Ships in Constrained Space
14:15-14:30	130	Hu Yicong, Qiao Kai, Tong Li, Zhang Chi, Gao Hui and Yan Bin	A CNN-based computational encoding model for human V1 cortex
14:30-14:45	147	Xu Fang, Yi Guo, Qi Wang and Zhen Fan	Research on Automatic Summary of Chinese Short Text Based on LSTM and Keywords Correction
14:45-15:00	148	Shenshen Gu and Tao Hao	A Pointer Network Based Deep Learning Algorithm for 0-1 Knapsack Problem
15:00-15:15	149	Ying Peng, Chang Su and Yijiang Chen	Chinese Metaphor Sentiment Analysis Based on Attention-Based LSTM
15:15-15:30	153	Liu Yang, Changjun Zhou, Hui Lv and Qiang Zhang	N-dimensional Matrices Operation Based on DNA Strand Displacement
March, 29 13:30-15:30	<b>Paper ID</b>	<b>Oral-29-3 Chair:</b>	<b>Li-Quan 1 (礼泉 1 厅)</b>
13:30 -13:45	29	Hayder F.N. Al-Shuka and Rui Song	On Low-Level Control Strategies of Lower Extremity Exoskeletons with Power Augmentation
13:45-14:00	41	Yanzhou Li, Yuanqing Wu and Shenghuang He	Global $H_\infty$ Pinning Synchronization for Complex Networks via Sampled-Data Communication
14:00-14:15	65	Chen Yaoqi, Shi Linjun and He Weiguo	Short-time Photovoltaic Power Prediction Considering Relative Affective Factor Based on Typical



			Weather Conditions
14:15-14:30	95	Xinrong Wu, Junwei Zhou, Jinghe An and Yanchao Yang	Abnormal Driving Behavior Detection for Bus Based on the Bayesian Classifier
14:30-14:45	115	Handayani Tjandrasa and Supeno Djanali	Classification of P300 Event-Related Potentials Using Wavelet Transform, MLP, and Soft Margin SVM
14:45-15:00	120	Qing Xu and Xiaoming Sun	Adaptive Operation-Space Control of Redundant Manipulators with Joint Limits Avoidance
15:00-15:15	123	Yao Li, Fan Zhun and Zhu Guijie	A SLAM with Simultaneous Construction of 2D and 3D maps Based on Rao-Blackwellized Particle Filters
15:15-15:30	128	Gang Liu, Jundong Si, Shan Li and Yanzhong Hu	Photographic image synthesis with improved U-net

March, 29 15:30-15:45	<b>Coffee break</b>
--------------------------	---------------------

March, 29 15:45-17:15	Paper ID	Oral-29-4 Chair	Guang-Yi (广益厅)
15:45-16:00	73	Wang Xiaofei, Qu Jianling, Di Yazhou, lu Yu and Qiao Yuchuan	Fast Online SVDD based on Support Vectors Merging
16:00-16:15	213	Tian Ni, Lei Wang, Qiaoyong Jiang, Jinwei Zhao and Zhiqiang Zhao	LSHADE with Semi-Parameter Adaptation for Chaotic Time Series Prediction
16:15-16:30	92	Minghui Shi, Xiangqian Liu, Changle Zhou, Fei Chao, Chang Liu, Xinze Jiao, Yifei An, Sandra Ebele Nwachukwu and Min Jiang	Towards portable SSVEP-based brain-computer interface using Emotiv EPOC and mobile phone
16:30-16:45	107	Wei Yan and Li Pan	Designing Focused Crawler Based On Improved Genetic Algorithm
16:45-17:00	110	Zhao Rentao and Shi Yang	Indoor Localization Algorithm Based on Hybrid Annealing Particle Swarm Optimization
17:00-17:15	126	Wenqi Xiao, Haolun Li, Jiajun Yan and Hao Gao	Accelerating Artificial Bee Colony Algorithm with New Multi-Dimensional Selection Strategies
March, 29 15:45-17:15	Paper ID	Oral-29-5 Chair:	Qiong-Lin(琼林厅)
15:45-16:00	157	Jixiang Zhang	Multiple Mittag-Leffler Stability of Fractional-Order Cohen-Grossberg Neural Networks with Non-Monotonic Piecewise Linear Activation Functions
16:00-16:15	161	Halefom Tekle	Deep Learning for Ethiopian Ge'ez

		Weldegebriel, Jinxiu Chen and Zhang Defu	Script Optical Character Recognition
16:15-16:30	170	Tao Hu, Weihua Li, Xianxiang Qin and Dan Jia	Image Semantic Segmentation Based on Convolutional Neural Network and Conditional Random Field
16:30-16:45	173	Wenxiang Zhang and Qingshan Liu	Using the Center Loss Function to Improve Deep Learning Performance for EEG Signal Classification
16:45-17:00	179	Wanshun Gao and Zhonghao Wang	Max-Margin Generative Adversarial Networks
17:00-17:15	181	Yan Huang, Wenhan Chao, Peidong Zhang and Yuanyuan Yu	History Attention for Source-Target Alignment in Neural Machine Translation
March, 29 15:45-17:15	<b>Paper ID</b>	<b>Oral-29-6 Chair:</b>	<b>Li-Quan 1 (礼泉 1 斤)</b>
15:45-16:00	137	Runzi Zhang, Jinlin Wang, Xiao Chen and Xiaozhou Ye	EDW-Voting: Robust Realtime Traffic Classification Combined with Flow Side Information
16:00-16:15	166	Jiao Zhang, Yonggang Huang, Qingzhao Jiang, Wenpeng Lu and Hualei Shen	Query Translation Based on Visual Information
16:15-16:30	172	Yuan Xu, Xue Jiang, Mingqing Zhang, Yanlin He and Fang Duan	A novel intelligent Faults diagnosis approach based on Ada-REIELM and its application to complex chemical processes
16:30-16:45	174	Issaret Prachitmutita, Wachirawit Aittinonmongkol, Nasoret Pojjanasuksakul, Montri Supattatham and Praisan Padungweang	Auto-scaling microservices on IaaS under SLA with cost-effective Framework
16:45-17:00	183	Yanhong Yang, Jun Yang and Hongbing Qian	Defect Prediction by Using Cluster Ensembles
17:00-17:15	194	Jing Luo, Chenguang Yang, Zhi Liu and Shi-Lu Dai	Tremor attenuation for surgical robots using support vector machine with parameters optimization

March, 29 18:30-20:30	<b>Award Banquet (Ming-Xiao 明宵厅)</b>
--------------------------	--------------------------------------

<b>March, 30</b>		
March, 30 8:00-9:00	<b>Topic: Challenges and Opportunities of Computational Intelligence</b> Prof. Jun Wang , Prof. Zhi-Hua Zhou, Prof. Kay Chen Tan, Prof. Yew Soon Ong, Prof. Yaochu Jin, Prof. Zeng-Guang Hou <b>Moderator:</b> Prof. Jun Wang	<b>Ming-Xiao (明宵厅)</b>
9:00-9:30	<b>Coffee break</b>	

March, 30 9:30-12:00	Paper ID	Oral-30-1 Chair:	Guang-Yi (广益厅)
9:30-9:45	131	Congbo Ma, Xiaowei Yang and Hu Wang	Randomized Online CP Decomposition
9:45-10:00	138	Kun Qian, Bin Li and Feng Zhang	A Variable Selection Method for Step Cost Facility Location and Network Design Problem
10:00-10:15	146	Qiangrong Yang, Jianyao Hu and Qi Peng	Solving the Missing Data Problem in Urban Traffic Estimation with Principal Component Analysis
10:15-10:30	156	Ying Xu, Ying Li, Wei Yang and Jin Zhang	A Multi-Factor Influencing POI Recommendation Model Based on Matrix Factorization
10:30-10:45	160	Chenchen Ding and Jinlong Li	Simulating Game Playing to Solve Max-SAT
10:45-11:00	164	Fang Xu and Jinlong Li	A Hybrid Encoded Memetic Algorithm for Set Covering Problem
11:00-11:15	177	Li Sanping	A New Image Watermarking Technique based on Random Forests
11:15-11:30	186	Qianyu Zhang, Bin Li and Feng Zhang	A MOEA/D Approach to Exploit the Crucial Structure of Convolution Kernels
11:30-11:45	200	Yang Tao, Chen Wen, Liu Zhengjun and Lin Ping	A Real Value Negative Selection Algorithm based on Antibody Evolution for anomaly detection

March, 30 9:30-12:00	Paper ID	Oral-30-2 Chair	Qiong-Lin(琼林厅)
9:30-9:45	182	Yunhao Ge, Bin Li, Weixin Yan and Yanzheng Zhao	A Real-time Gesture Prediction System Using Neural Networks and Multimodal Fusion based on data glove
9:45-10:00	187	Wang Yuxin, Xu Tongkun, Xue Shiqing and Shen Yanming	D2P-Apriori: A deep parallel frequent itemset mining algorithm with dynamic queue
10:00-10:15	197	Hongli Deng, Lei Zhang and Lituan Wang	Sentence Representation and Classification Using Attention and Additional Language Information
10:15-10:30	198	Feng Xu, Zexin Li and Dongsheng Guo	Verification and Application of Discrete-Time ZD with Cube Characteristics for Solving the System of Time-Varying Nonlinear Equations
10:30-10:45	196	Ping Xie, Zhong-Shan Zhang and Jin Zhang	Inter-Satellite Routing Algorithm by Searching the Global Neighborhood for Dynamic Inter-Satellite Networks
10:45-11:00	227	Siying He, Yule Yuan, Canmiao Fu, Xuefeng Hu and Yong Zhao	Robust License Plate Detection Using Profile-based Filter
11:00-11:15	216	Yung-Chun Chang, Fang Yi Lee and Chun Hung Chen	A Public Opinion Keyword Vector for Social Sentiment Analysis Research
11:15-11:30	220	Kenichi Tamura	A Heuristic Strategy of a Bayesian Optimization Algorithm for Evaluation-times Constrained Optimization (ECO) Problems
11:30-11:45	226	Lingshan Zhao, Yanpeng Qu and Anshdeng Deng	Multiple Kernel Learning-based Multi-functional Nearest-neighbor Classification

March, 30 12:00-13:30	<b>Lunch break</b>
--------------------------	--------------------

POSTERS			
March, 30 12:45-13:30	Paper ID	Poster Session 2 Chair: Dr. Xiangxiang Zeng	Li-Quan 2 (礼泉 2 厅)
	163	Hongwei Chen, Yajun Hou, Qixing Luo, Zhou Hu and Lingyu Yan	Text Feature Selection Based on Water Wave Optimization Algorithm
	165	Jia Zhao, Yingmei Qin, Zhuanning Qin, Chunxiao Han and Yanqiu Che	Vibrational Resonance Influenced by the Neuronal Heterogeneity in A Random Network with Time Delays
	175	Lulu Shi, Yan Wu and Yan Zhou	A Hybrid Immigrants Strategy for Dynamic Multi-objective Optimization
	176	Jiawei Zhang, Zhaoquan Cai, Xichun Liu and Lining Xing	A Multiobjective Satellite Data Transmission Scheduling Technology Based on NSGA-II
	185	Lanlan Shi, Xiaojun Wang, Changjun Zhou and Qiang Zhang	The Neuronal Perceptron Based on DNA Strand Displacement
	190	Zhongke Li and Changsheng Wan	Visual Tracking with Re-Detection Based on Feature Combination
	212	Shouyu Huo, Dongdong Zhao, Xing Liu, Jianwen Xiang, Yingshou Zhong and Haiguo Yu	Using Machine Learning for Software Aging Detection in Android System
	231	Feng Jiang, Zijun Peng and Jiaqi He	Short-term Load Forecasting Based on Support Vector Regression with Improved Grey Wolf Optimizer
	234	Min Jiang, Weizhen Hu, Liming Qiu, Minghui Shi and Kay Chen Tan	Solving Dynamic Multi-objective Optimization Problems via Support Vector Machine
	236	Hassan Bin Younis, Khurram Kamal, Muhammad Fahad Sheikh, Amir Hamza and Tayyab Zaffar	Prediction of Fatigue Crack Growth Rate in Aircraft Aluminium Alloys using Radial Basis Function Neural Network
	246	Huadong Qiu, Ying Tu and Yan Zhang	Anomaly detection for power consumption patterns in electricity early warning system
	248	Yan Zhang, Ying Tu, Huadong Qiu and Ying Tu	A Multi-agent Based Intelligent Scheduling Algorithm
	3	Yang Wang, Ye Tian, Tie-Shan Li, Yihua Zhou and Dong-Cheng Peng	Visualization analysis of Shipping Recruitment Information Based on R
	23	Qi Wang and Lu Zeng	Chinese Symptom Component Recognition via Bidirectional LSTM-CRF
	36	Xianhao Sheng, Kangyong Liu, He Nai and Miao Ye	Sweep Coverage Optimization for Mobile Sensor Networks in Multi-obstacles Scene

70	Yung-Fa Huang, Tan-Hsu Tan, Song Ping Liu, Tsung-Yu Liu and Ching-Mu Chen	Performance of Subcarrier Allocation of D2D Multicasting for Wireless Communication Systems
81	Shu-Tong Xie and Gang Wang	Optimizing Cutting Parameters in Parallel Turnings Using Particle Swarm Intelligence
89	Qian Qian, Chihang Zhao, Qian Dang and Jie He	Recognition of Pavement Damage Types Based on Features Fusion
94	Shuaiwen Zhang, Haiyan Yang and Cheng Han	Multiple Route Planning Algorithm Based on Improved K-means Clustering and Particle Swarm Optimization
104	Mengchi Lu, Long Gao, Xifeng Guo and Jianping Yin	A Framework of Predicting Drug Resistance of Lung Tuberculosis by Utilizing Radiological Images
142	Xiaolong Hui, Jiang Bian, Xiaoguang Zhao and Min Tan	Deep-learning-based Autonomous Navigation Approach for UAV Transmission Line Inspection
154	Kai Zhang, Bin Li and Rentuo Tao	SAR Image Retrieval based-on Fly Algorithm
155	Fanzhi Meng	A network threat analysis method combined with kernel PCA and LSTM-RNN
205	Ning Wang, Yuncheng Gao, Yongpeng Weng, Zhongjiu Zheng and Hong Zhao	Implementation of an Integrated Navigation, Guidance and Control System for an Unmanned Surface Vehicle
209	Xiuli Wu, Xiao Xiao and Linjuan Zhang	Solving Optimization of three-stage Operating Room Scheduling Based on RVNS-GA
211	Hongze Liu, Zhengjiang Liu and Dexin Liu	Application of Machine Learning Methods in Maritime Safety Information Classification
225	Mengyuan Ren, Yanpeng Qu and Anshdeng Deng	Covering Rough Set-based Three-way Decision Feature Selection
229	Lulu Song and Yun Dong	An Improved Differential Evolution Algorithm with Local Search for Capacitated Vehicle Routing Problem
232	Hao-Tian Wu, Shaohua Tang and Jean-Luc Dugelay	Image Reversible Visual Transformation Based on MSB Replacement and Histogram Bin Mapping
235	Shanshan Hao, Yuping Wang and Beicong Lv	A New Optimization Model and Algorithm for Virtual Network Scheduling Problem in Elastic Optical Networks
239	Jia Song, Mingfei Zhao, Likun Bian and Peng Wang	An Intelligent Semi-Physical Simulation System For Hybrid Flight Vehicles
240	Fangqing Gu, Yiu-Ming Cheung, Hai-Lin Liu and Zixian Lin	A Parameterless Decomposition-based Evolutionary Multi-objective Algorithm
243	Wang Minmin and Jiang Min	Combing Gibbs-sampling with Adaptive Particle Swarm for Large Scale Global Optimization

March, 30 13:30- 15:30	<b>Paper ID</b>	<b>Oral-30-3 Session 1: Intelligent Systems and Applications Chair: Shyi-Ming Chen &amp; Han Liu</b>	<b>Guang-Yi (广益厅)</b>
13:30 - 13:45	178	Qi Wang, Ting Wang and Chenming Xu	Using a Knowledge Graph for Hypernymy Detection between Chinese Symptoms
13:45- 14:00	133	Rongrong Wang and Lianhai Zhang	Acoustic Unit Discovery Based on Multilingual Resource Using Variational Bayesian Method
14:00- 14:15	33	Cui Liu, Wei Zhang, Jianhua Guo and Zuofei Liu	Research on Torque Compensation Control Strategy for Four-wheel Drive Hybrid System in Rapid Acceleration
14:15- 14:30	34	Han Liu and Mihaela Cocea	Fuzzy Rule Based Systems for Gender Classification from Blog Data
14:30- 14:45	43	Guohua Wu, Longfei Zhang, Minfan He, Ying Yu, Huangke Chen and Rui Wang	An Across Neighborhood Search Algorithm with a Solution Difference Perturbation Mechanism for Solving Economic Dispatch Problems
14:45- 15:00	51	Chun-Ming Tsai, John Kun- Han Li and Shao-Chi Chen	Digits Detection in Watt Hour Meter
15:00- 15:15	54	Peide Liu, Shyi-Ming Chen and Peng Wang	The q-Rung Orthopair Fuzzy Power Maclaurin Symmetric Mean Operators
15:15- 15:30	192	Lee Chun Wang	Lighting to Parametric Design for General Illumination Layout
March 30 13:30- 15:30	<b>Paper ID</b>	<b>Oral-30-4 Session 2: Intelligent Big Data Computing for Future Internet of Things Session 6: Computational Intelligence in Feature Selection, Feature Extraction and Dimensionality Reduction in Image and Pattern Recognition Chair: Prof. Hongju Chen</b>	<b>Qiong-Lin(琼 林厅)</b>
13:30 - 13:45	203	Hongju Cheng, Leihuo Wu, Yayun Zhang and Naixue Xiong	Data Recovery in Wireless Sensor Networks Using Markov Random Field Model
13:45- 14:00	134	Zhibin Su, Dongrui Li, Bo Li and Hui Ren	Objective Visual Comfort Assessment Model of Stereoscopic Images based on BP Neural Network
14:00- 14:15	141	Junjie Yang, Yi Guo, Mo Chen and Hao Yang	A Sparsity-Relaxed Algorithm for the Under-determined Convolutional Blind Source Separation
14:15- 14:30	152	Guangle Yao and Jiandan Zhong	Learning Class Distribution Information for Action Recognition
14:30- 14:45	159	Xiaohua Wang, Muzi Peng, Min Hu, Chunhua Jin and Fuji Ren	Combination of Valence-Sensitive Loss with Restrictive Center Loss for Facial Expression Recognition
14:45-	221	Qianyi Zhang, Yanpeng Qu,	Hierarchical Quotient Spaces-based

15:00		Anshdeng Deng and Longzhi Yang	Feature Selection
15:00-15:15	222	Xiaomeng Han, Yanpeng Qu and Anshdeng Deng	A Laplace Distribution-based Fuzzy-rough Feature Selection Algorithm
15:15-15:30	250	Peng Gang, Jiang Hui, Wei Zeng, Yuri Gordienko, Yuriy Kochura, Oleg Alienin, Oleksandr Rokovyi and Sergii Stirenko	Dimensionality Reduction in Deep Learning for Chest X-Ray Analysis of Lung Cancer

15:30-15:45	<b>Coffee break</b>
-------------	---------------------

March 30 15:45-17:15	<b>Paper ID</b>	<b>Oral-30-5 Session 1: Intelligent Systems and Applications Chair: Heng-Li Yang &amp; Shinfeng Lin</b>	<b>Guang-Yi (广益厅)</b>
15:45-16:00	96	Wen-Chung Tsai, Nien-Ting Huang, Mao-Lun Chiang and Ting-Ming Tsai	An Implementation of IoT Gateway for Narrow Bandwidth and Massive Machine-Type Communications over B4G Cellular Network
16:00-16:15	101	Yu-Ren Chen and Yi-Chung Chen	Path Planning in Large Area Monitoring by Drones
16:15-16:30	105	Hsiang-Chuan Liu, Ben-Chang Shia, Mingchih Chen and Ke-Fei Wu	An Improved DEMATEL Theory Based on Generalized Semantic Structural Analysis
16:30-16:45	109	Chen-Yeng Peng and Rung-Ching Chen	Voice Recognition by Google Home and Raspberry Pi for Smart Socket Control
16:45-17:00	13	Shinfeng Lin and Ding-En Wang	Features Selection and Statistical Classification for Pose-Invariant Face Recognition
17:00-17:15	24	Heng-Li Yang and Shiang-Lin Lin	User Adoption of Location-Based Service
15:45-17:15	<b>Paper ID</b>	<b>Oral-30-6 Session 3:Advanced Intelligent Control of Autonomous Systems Oral Session 5: Multiobjective Optimization Algorithms and Its Applications for Financial and Economic Problems Oral Session 7: Intelligent Computing Methods for Big Data Analytics Chair: Prof. Yiu-Ming Cheung</b>	<b>Qiong-Lin(琼林厅)</b>
15:45-16:00	136	Jiadong Gu and Defeng Wu	A Random Distribution Harmony Search Algorithm
16:00-16:15	204	Ning Wang, Shaofan Guo, Jianchuan Yin, Zhongjiu Zheng and Hong Zhao	Hybrid Feedforward-Feedback Robust Adaptive Extreme Learning Control for Euler-Lagrange Systems
16:15-16:30	237	Heng Zhang, Yaoyu Zhao, Feng Wang, Anran Zhang,	A new evolutionary algorithm based on MOEA/D for portfolio



		Pengwei Yang and Xiaoliang Shen	optimization
16:30-16:45	241	Yiqun Zhang and Yiu-Ming Cheung	A Fast Hierarchical Clustering Approach Based on Partition and Merging Scheme
16:45-17:00	242	Hao Lan Zhang, Jiming Liu, Yiu-Ming Cheung and Xingsen Li	Constructing Weighted Networks based on EEG Data Segmentation for Brain Wave Pattern Recognition

**March, 31 2018**

March 31 8:30-9:15	Paper ID	<b>Oral-31-1 Session 1: Intelligent Systems and Applications Oral Session 4: Intelligent Data Analytics and Its Applications Chair: Prof. Zne-Jung Lee &amp; Prof. Sano Natsuki</b>	<b>Guang-Yi (广益厅)</b>
8:00-8:15	202	Yongjia Yu, Zengpeng Sun, Xiaoguang Zhao, Jiang Bian and Xiaolong Hui	Design and Implementation of an Automatic Peach- Harvesting Robot System
8:15-8:30	86	ahmed Fahmy, Ahmed Yousef and Hoda Mohamed	On the Use of Predictive Analytics Techniques for Network Elements Failure Prediction in Telecom Operators
8:30-8:45	97	Peichao Wang, Yun Zhou, Cheng Zhu and Ruiqi Yue	Role Classification with Netflow Data in Intranet
8:45-9:00	116	Lee Chou-Yuan, Ma Wei-Ping, Weng Yu-Lin, Lee Zne-Jung, Lee Yuan-Chih and Jian-Qiong Huang	Analyze the Rainfall of Landslide on Apache Spark
9:00-9:15	122	Bin-Yu Peng, So-Tsung Chou, Chou-Yuan Lee, Kuo-Chung Chu, Sano Natsuki and Zne-Jung Lee	An Integrated Analytics Model Applied to Power Consumption

March 31 9:15-9:45	<b>Coffee break</b>
-----------------------	---------------------

March 31 9:45-11:30	Paper ID	<b>International Workshop on Benchmarking of Computational Intelligence Algorithms Chair:Dr. Thomas Weise</b>	<b>Guang-Yi (广益厅)</b>
9:45-10:00	68	Yiqin Zhang, Fenlin Liu, Hongyan Jia, Jicang Lu and Chunfang Yang	Optimization of Rich model based on Fisher criterion for image steganalysis
10:00-10:15	93	Zimian Wei, Yawen Cui, Wenjing Yang, Yin Li, Xiaodong Yi,	A Research on Metric Learning in Computer Vision and Pattern Recognition

		Huadong Dai and Xiaotian Zhou	
10:15-10:30	150	Haisheng Sun, Chuang Liu, Rui Xu and Huaping Chen	An Improved Estimation of Distribution Algorithm for Cloud Computing Resource Scheduling
10:30-10:45	180	Meng Zhao and Jinlong Li	Tuning the Hyper-parameters of CMA-ES with Tree-structured Parzen Estimators
10:45-11:00	207	Jialing Li and Fei Han	A Hybrid Multi-swarm Particle Swarm Optimization with One-dimensional Chaotic Search Strategy
11:00-11:15	219	Rong Zhao, Yanpeng Qu, Anshdeng Deng and Reyer Zwiggelaar	A Density-based Discretization Method With Inconsistency Evaluation
11:15-11:30	245	Qi Qi, Thomas Weise and Bin Li	Optimization Algorithm Behavior Modeling: A Study on the Traveling Salesman Problem

12:00-13:30	<b>Lunch break</b>
-------------	--------------------

# Map of the City Hotel of Xiamen

## 厦门宾馆区域图



# Floor plan

