PROGRAMME

The 9th International Symposium on Intelligence Computation and Applications

（ISICA2017）

South China Agricultural University

November 18-19, 2017, Guangzhou China

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ISICA 2017 Organization

Honorary Chairs	Hisao Ishibuchi, Osaka Prefecture University, Japan Qingfu Zhang, City University of Hong Kong, China Yang Xiang, Deakin University, Australia
General Chair	Kangshun Li, South China Agricultural University, China Zhangxin Chen, University of Calgary, Canada Yong Liu, University of Aizu, Japan
Program Chairs	Aniello Castiglione, University of Salerno, Italy Jing Liu, Xidian University, China Hailin Liu, Guangdong University of Technology, China
Publicity Chairs	Lei Yang, South China Agricultural University, China Lixia Zhang, South China Agricultural University, China
Local Arrangement Chair	Wei Li, South China Agricultural University, China Yan Chen, South China Agricultural University, China

Secretaries

Wei Li	Lixia Zhang
Lei Yang	Lu Xiong
Chen Yan	Hui Wang

Technical Program

Schedule Overview

Saturday, Nov. 18	ISICA 2017 Programme
8:00-8:30	Sign In
8:30-9:00	Opening Ceremony
9:00-9:20	Group Photograph Taking
9:20-10:10	Keynote Speech (1) Kay Chen Tan
10:10-10:20	Coffee Break
10:20-11:10	Keynote Speech (2) Zhangxing Chen
11:10-12:00	Keynote Speech (3) Yiu-ming Cheung
12:00-12:30	Lunch
12:30-13:30	Poster Presentation
13:30-14:20	Keynote Speech (4) Jun Zou
14:20-15:10	Keynote Speech (5) Qingfu Zhang
15:10-16:00	Keynote Speech (6) Aimin Zhou
16:00-16:10	Coffee Break
16:10-18:00	Oral Presentation
18:00-18:10	Best paper award ceremony
18:10-21:00	Banquet
21:00-22:30	Pearl River Night Cruise (Limited Experts)

40 minutes for Keynote Speech and 10 minutes for questions;
7 minutes for Oral Presentation and 3 minutes for questions

Technical Program

Schedule Overview

Sunday, Nov. 19	ISICA 2017 Programme
8:30-9:20	Keynote Speech (7) Maoguo Gong
9:20-10:10	Keynote Speech (8) Yong Liu
10:10-10:20	Coffee Break
10:20-12:00	Oral Presentation
12:00-14:00	Lunch
14:00	Conference Close

40 minutes for Keynote Speech and 10 minutes for questions;
7 minutes for Oral Presentation and 3 minutes for questions.

Keynote Speech Overview

Saturday, Nov. 18

Presentation Venue: No. 1 Conference Room

9:20-10:10 Keynote Speech (1) Kay Chen Tan
Session Chair: Prof. Yong Liu
10:10-10:20 Coffee break
10:20-11:10 Keynote Speech (2) Zhangxing Chen
Session Chair: Prof. Jun Zou
11:10-12:00 Keynote Speech (3) Yiu-ming Cheung
Session Chair: Prof. Yong Liu

13:30-14:20 Keynote Speech (4) Jun Zou
Session Chair: Prof. Yiu-ming Cheung
14:20-15:10 Keynote Speech (5) Qingfu Zhang
Session Chair: Prof. Yiu-ming Cheung
15:10-16:00 Keynote Speech (6) Aimin Zhou
Session Chair: Prof. Yong Liu
Presentation Venue: No. 1 conference room
Session Chair: Prof. Jun Zou

Sunday, Nov. 19

Presentation Venue: No. 1 Conference Room

8:30-9:20 Keynote Speech (7) Maoguo Gong
Session Chair: Prof. Aimin Zhou
09:20-10:10 Keynote Speech (8) Yong Liu
Session Chair: Prof. Jun Zou

Keynote Speakers (1)

Kay Chen Tan
Professor
Department of Computer Science
City University of Hong Kong
Email: kaytan@ cityu.edu.hk

Title: Differential Evolution-based Methods for Numerical Optimization

Abstract:

Differential Evolution (DE) is arguably one of the powerful metaheuristics for solving numerical optimization problems. Although considerable research has been devoted to the development and improvement of DE, there exist several open issues. This talk will discuss our recent works on designing new DE operators and algorithms to overcome limitations of existing approaches in handling single and multi-objective optimization problems. Application of the proposed DE for solving difficult minimax optimization problems will also be presented.

Bio:

Prof. TAN Kay Chen received the B.Eng. degree (First Class Hons.) and the Ph.D. degree from the University of Glasgow, U.K., in 1994 and 1997, respectively. He is a Professor with the Department of Computer Science, City University of Hong Kong, Hong Kong.

He has published over 130 journal papers and over 130 papers in conference proceedings, and co-authored six books. His current research interests include artificial/computational intelligence and machine learning, with applications to evolutionary multi-objective optimization, data analytics, prognostics, BCI, and operational research etc.

He is the Editor-in-Chief of IEEE Transactions on Evolutionary Computation (IF: 10.629), was the EiC of IEEE Computational Intelligence Magazine (2010-2013), and currently serves on the Editorial Board of over 10 international journals such as IEEE Transactions on Cybernetics, IEEE Transactions on Computational Intelligence and AI in Games, Evolutionary Computation (MIT Press) etc. He has been an invited Keynote/Plenary speaker for over 60 international conferences and was the General Co-Chair for IEEE World Congress on Computational Intelligence (WCCI) 2016 in Vancouver, Canada. He also serves as the General Co-Chair for IEEE Congress on Evolutionary Computation (CEC) 2019 in Wellington, New Zealand.

He is a Fellow of IEEE, an elected AdCom member of IEEE Computational Intelligence Society (2014-2019), and an IEEE Distinguished Lecturer (2011-2013; 2015-2017). He received the 2016 IEEE Transactions on Neural Networks and Learning Systems Outstanding Paper Award. He was the awardee of the 2012 IEEE Computational Intelligence Society Outstanding Early Career Award for his contributions to evolutionary computation in multi-objective optimization. He also received the Recognition Award (2008) from the International Network for Engineering Education & Research (iNEER) for his outstanding contributions to engineering education and research.

Websites:
http://www6.cityu.edu.hk/stfprofile/kaytan.htm

Keynote Speakers (2)

Zhangxing Chen
Professor
Professor, NSERC/AIEES/Foundation CMG Chair and AITF (iCORE) Chair
Director, Foundation CMG/Frank-Sarah Meyer Collaboration Centre
Director, Global Initiative in Research on Unconventional Oil and Gas: Beijing Site
Fellow of Canadian Academy of Engineering
Department of Chemical & Petroleum Engineering,
University of Calgary
Email: zhachen@ucalgary.ca

Title: Using Big Data and AI to Develop Energy

Abstract:

The future development of energy from conventional fossil fuel to unconventional fossil fuel and from fossil fuel to renewable energy depends on the use of and exploitation of big data and artificial intelligence (AI) techniques. These new techniques will yield sustainable energy in an environmentally sensitive manner. This is the path to high resolution control tools that enable efficient and secure processes for optimal energy development in reducing costs and environmental impacts. These tools exploit a new understanding of the interfaces for energy development in an immersive, collaborative environment. They involve advanced processes of big data, augmented reality, machine learning and virtual reality to understand alternative pathways for the energy future.

Bio:

Dr. Chen is a professor in the Department of Chemical and Petroleum Engineering at the University of Calgary, Dr. Chen has the distinction of holding two Research Chairs: the AITF (Alberta Innovate Technology Future, formerly, iCORE) Industrial Chair in Reservoir Engineering and the NSERC (Natural Science and Engineering Research Council of Canada) /AIEES (Alberta Innovate Energy and Environment Solutions) / Foundation CMG (Computer Modelling Group) Senior Industrial Research Chair in Reservoir Simulation. He is one of the most distinguished researchers in reservoir engineering and simulation in the world. His Reservoir Simulation Chair is unique in Canada and provides a focus on Canadian oil and gas reservoirs. Dr. Chen is a Fellow of Canadian Academy of Engineering.

Dr. Chen has published over 650 papers, written 12 textbooks, edited 7 books, and had 17 international patents. He has published in Nature, Proceedings of the National Academy of Sciences (PNAS), Nano Today and leading journals in petroleum engineering and energy such as SPE Journal, AIChe, and Energy. He has served on the editorial boards of a dozen international high impact journals, delivered 375 invited, plenary and keynote research presentations worldwide, and chaired 35 international congresses and conferences.

Websites:

http://schulich.ucalgary.ca/profiles/zhangxing-john-chen

Keynote Speakers (3)

Yiu-ming Cheung

Professor
Associate Director， Institute of Computational and Theoretical Studies
Full Professor, Department of Computer Science,
Hong Kong Baptist University, Hong Kong
Email: ymc@comp.hkbu.edu.hk

Title: Class Imbalance Learning Problem, Modelling and Challenges

Abstract:

In many practical problems, number of data form difference classes can be quite imbalanced, which could make the performance of the most machine learning methods become deteriorate to a certain degree. As far as we know, the problem of learning from imbalanced data continues to be one of the challenges in the field of data engineering and machine learning, which has attracted growing attentions in recent years. In this talk, we will first formally describe the class imbalance problem and its significance with examples from real world applications, and review the existing solutions. Then, three research problems, i.e. sampling strategy, classifier weights of boosting and imbalanced streaming data with concept drift, are studied. Accordingly, we have proposed a solution for each problem. The first solution, namely Hybrid Sampling with Bagging (HSBagging) method, utilizes a new hybrid scheme of undersampling and oversampling with sampling rate selection. This method features both of undersampling and oversampling, and the specifically selected sampling rate for each data set. The second solution is called G-mean Optimized Boosting (GOBoost), which is a boosting framework where the

classifier weights are optimized on geometric mean measurement. GOBoost is an ensemble framework that can be applied to any boosting-based method for class imbalance learning by simply replacing the classifier weights updating module. The last solution is called Dynamic Weighted Majority for Imbalance Learning (DWMIL). It creates a base classifier for each chunk and weighs them according to their performance evaluated on the current chunk. Thus, a classifier trained recently or on the similar concept to the current chunk will receive high weight in the ensemble to help prediction. Finally, some challenging problems in this topic are explored as well.

Bio:

Yiu-ming Cheung received Ph.D. degree from Department of Computer Science and Engineering at The Chinese University of Hong Kong in 2000. He joined the Department of Computer Science in Hong Kong Baptist University (HKBU) in 2001, and became a full professor since 2012. He is an IET/IEE Fellow, British Computer Society (BCS) Fellow and IETI Fellow, as well as the recipient of "Chu Tian Scholars" in China. His research interests include machine learning, pattern recognition, image and video processing, and optimization. He has published over 200 articles in the high-quality conferences and journals, including IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Image Processing, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on SMC (Part B), Pattern Recognition, and so on. Moreover, he has been granted three invention patents. In recognition of his innovative work, he has been awarded two most prestigious prizes: (1) the Gold Medal with Distinction (i.e. the highest grade in Gold Medals) and (2) Swiss Automobile Club Prize, in the 45th International Exhibition of Invention, Geneva, Switzerland, on March 29-April 2, 2017, which were selected from 1000 new inventions and products of 700+ competition teams from 40 countries. Furthermore, he was the Gold Award Winner of Hong Kong Innovative Invention Award in the Seventh Hong Kong Innovative Technologies Achievement Award 2017. In addition, he was the recipient of the Best Research Paper Award in IEEE IWDVT'2015 and ICNC-FSKD'2014, respectively, and the recipient of 2011 Best Research Award in

Department of Computer Science, HKBU. He is the Founding and Past Chairman of IEEE (Hong Kong) Chapter of Computational Intelligence Society, and the Vice-Chair of IEEE Computer Society Technical Committee on Intelligent Informatics. Furthermore, he has taken the key positions in several international conferences, e.g. Area Chair of ICDM'2017, Program Committee Chair of WI'2012 and IAT'2012, Organizing Committee Chair of WI'06, IAT'06, ICDM'06, and IDEAL'2003. He has served as the Guest Editor / Associate Editor in several prestigious international journals, including: IEEE Transactions on Neural Networks and Learning Systems, Pattern Recognition, and Knowledge and Information Systems: An International Journal.

Websites:
http://www.comp.hkbu.edu.hk/~ymc/

Poster Presentation

Sunday, Nov. 18
12:30-13:30
Presentation Venue: 3nd Floor Exhibition Areas

1. Real-time RGBD object tracking via collaborative appearance and motion models
   Danxian Chen, Zhanming Liu, Hefeng Wu and Jin Zhan

2. Real-time tracking with multi-center kernel correlation filter
   Zhiqiang Zhao, Zongmin Cui, Lihua Tang, Anyuan Deng and Xiao Yang

3. Multi-objective Gene Expression Programming Based Automatic Clustering Method
   Ruochen Liu, Jianxia Li and Manman He

4. Convenient Top-k Location-text Publish/subscribe Scheme
   Hong Zhu, Hongbo Li, Zongmin Cui, Zhongsheng Cao and Meiyi Xie

Keynote Speakers (4)

Jun Zou
Professor
Department of Mathematics,
The Chinese University of Hong Kong
Email: zou@math.cuhk.edu.hk

Title: A systematic review on recent significant advances in inverse scattering problems

Abstract:

In this talk we will present a systematic review on the motivation, background and important applications of the inverse acoustic and electromagnetic medium scattering problems. Recent significant advances in both efficient numerical algorithms and their robustness against the large noise in observation data will be discussed and demonstrated.

Bio:

Jun Zou is a professor at Department of Mathematics, The Chinese University of Hong Kong. Before taking up his current position in Hong Kong, he had worked for two years (93-95) in University of California at Los Angeles as a post-doctoral fellow and a CAM Assistant Professor, worked for two and a half years (91-93) in Technical University of Munich as a Visiting Research Scholar and an Alexander von Humboldt Research Fellow, and worked for two years (89-91) in Chinese Academy of Sciences (Beijing) as an

Assistant Professor. His major research interests include numerical solutions of Maxwell equations, interface problems, ill-posed and inverse problems, as well as domain decomposition methods and preconditioned iterative methods.

Websites:
http://www.math.cuhk.edu.hk/~zou/

Keynote Speakers (5)

Qingfu Zhang
Professor
Department of Computer Science,
City University of Hong Kong
Email: qingfu.zhang @ cityu.edu.hk

Title: Recent Progress in MOEA/D

Abstract:

Multiobjective Evolutionary Computation has been a major research topic in the field of evolutionary computation for many years. It has been generally accepted that combination of evolutionary algorithms and traditional optimization methods should be a next generation multiobjective optimization solver. Decomposition methods have been well used and studied in traditional multiobjective optimization. It is well known that the Pareto optimal solution set of a continuous multiobjective problem often exhibits some regularity. In this talk, I will describe MOEA/D and its recent progress. MOEA/D decomposes a multiobjective problem into a number of subtasks, and then solves them in a collaborative manner. It provides a very natural bridge between multiobjective evolutionary algorithms and traditional decomposition methods. It has been a commonly used evolutionary algorithmic framework in recent years.

Bio:

Qingfu Zhang is currently a Professor with the Department of Computer Science, City University of Hong Kong, and the School of Computer Science and Electronic

Engineering, University of Essex, UK. He is also a Changjiang Visiting Chair Professor in Xidian University, China. He holds two patents and is the author of many research publications. His main research interests include evolutionary computation, optimization, neural networks, data analysis, and their applications.

Dr. Zhang is an Associate Editor of the IEEE Transactions on Evolutionary Computation and the IEEE Transactions on Systems, Man, and Cybernetics–Part B. He is also an Editorial Board Member of three other international journals. MOEA/D, a multobjevitve optimization algorithm developed in his group, won the Unconstrained Multiobjective Optimization Algorithm Competition at the Congress of Evolutionary Computation 2009, and was awarded the 2010 IEEE Transactions on Evolutionary Computation Outstanding Paper Award.

Websites:

http://www.cs.cityu.edu.hk/~qzhang/index.html

Keynote Speakers (6)

Aimin Zhou
Professor
School of Computer Science and Software Engineering,
East China Normal University
Email: amzhou @ at cs.ecnu.edu.cn

Title: Towards Learning Guided Evolutionary Optimization: A Self-Organizing Multiobjective Evolutionary Algorithm

Abstract:

Learning guided evolutionary optimization utilizes statistical & machine learning techniques to assist the evolutionary algorithms. The learning techniques can be used to extract the problem and algorithm information online and thus to improve the algorithm performance. When using learning techniques in evolutionary algorithms, there arises a variety questions, such as why using learning techniques, which learning techniques to use, and how to use learning techniques. In this talk, we try to answer some of these questions by using a self-organizing multiobjective evolutionary algorithm (SMEA). Under mild conditions, the Pareto front (Pareto set) of a continuous m-objective optimization problem forms an (m−1)-dimensional piecewise continuous manifold. Based on this property, we proposed SMEA. At each generation, a self-organizing mapping method with (m−1) latent variables is applied to establish the neighborhood relationship among current solutions. A solution is only allowed to mate with its neighboring solutions to generate a new solution. To reduce the computational overhead, the self-organizing training step and the evolution step are conducted in an alternative

manner. In other words, the self-organizing training is performed only one single step at each generation. SMEA has been applied to a number of test instances and compared with some state-of-the-art multiobjective evolutionary methods. The results have demonstrated its advantages over other approaches.

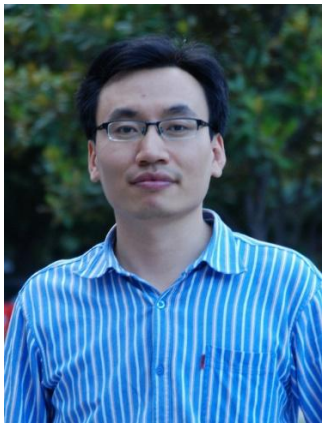
Bio:

Dr. Aimin Zhou is currently a Professor with the Department of Computer Science and Technology, East China Normal University, Shanghai, China. He received the B.Sc. and M.Sc. degrees from Wuhan University, Wuhan, China, in 2001 and 2003, respectively, and the Ph.D. degree from University of Essex, Colchester, U.K., in 2009, all in computer science. His research interests include evolutionary computation and optimization, machine learning, image processing, and their applications. He has published over 50 peer-reviewed papers, and received the best paper award in IES 2014. He is an Associate Editor of the Swarm and Evolutionary Computation, the Complex & Intelligent Systems, and the Swarm Intelligence and Numerical Methods.

Websites:

http://faculty.ecnu.edu.cn/s/1949/t/22631/main.jspy

Keynote Speakers (7)



Maoguo Gong
Professor
Director, Collaborative Innovation Center for Computational Intelligence (OMEGA)
Chief Scientist, National Key Research andDevelopment Program of China
Chief Scientist, Key Innovative Research Team of Shaanxi Province
Key Laboratory of Intelligent Perception and Image Understanding
Xidian University, Xi'an, China
Email: gong@ ieee.org

Title: Multi-objective Evolutionary Learning for Deep Neural Networks

Abstract:

Deep neural networks are currently popular learning models for imitating the hierarchical architecture of human brain. They have the properties of modeling and representing complex data and unsupervised feature learning. In this talk, we introduce a multiobjective sparse feature learning model based on DNN. It is learnt by optimizing two objectives, reconstruction error and the sparsity of hidden units simultaneously based on a multiobjective evolutionary algorithm. We will also introduce two DNN methods for change detection in remote sensing imagery.

Bio:

Dr. Maoguo Gong received the B. Eng degree and Ph.D. degree from Xidian University.

Since 2006, he has been a teacher of Xidian University. He was promoted to associate professor and full professor in 2008 and 2010, respectively, both with exceptive admission.

Gong's research interests are broadly in the area of computational intelligence, with applications to optimization, learning, data mining and image understanding. He has published over one hundred papers in journals and conferences, and holds over twenty granted patents as the first inventor. He is leading or has completed over ten projects as the Principle Investigator, funded by the National Natural Science Foundation of China, the National Key Research andDevelopment Program of China, the National High Technology Research and Development Program of China and others. He was the recipient of the prestigious National Program for Support of Top-notch Young Professionals (selected by the Central Organization Department of China), the Excellent Young Scientist Foundation (selected by the National Natural Science Foundation of China), the New Century Excellent Talent in University (selected by the Ministry of Education of China), the Young Teacher Award by the Fok Ying Tung Education Foundation, and the National Natural Science Award of China.

He is the Executive Committee Member of Chinese Association for Artificial Intelligence, Senior Member of IEEE and Chinese Computer Federation, Associate Editor or Editorial Board Member for over five journals including IEEE Transactions on Evolutionary Computation.

Websites:
http://see.xidian.edu.cn/faculty/mggong/index.htm

Keynote Speakers (8)

Yong Liu
Professor
System Intelligence Laboratory
University of Aizu
Email: yliu@u-aizu.ac.jp

Title: Evolutionary Broad and Deep Learning Networks

Abstract:

Although deep learning has demonstrated some remarkable success in the applications of speech and image recognition, design of deep architectures still suffers from extremely time-consuming training processes because it often involves many retraining processes on big data if the trained deep architectures are not sufficient to model the data. It is quite common to take days to months of time on hundreds of machines to train deep neural networks for a single application.

In the last decade, deep neural networks have doubled in size roughly every 2.4 years, which have been driven by the improved computer infrastructures and the faster growing datasets. With such trend of the increasing model size in deep learning, architecture design has become a key design consideration for determining the overall structure on the number of layers, the number of units and their connections. This talk discusses how to design broad and deep networks by evolutionary algorithms, and how to implement deep architecture design in the laboratory. Deep networks enhanced with the evolved learning

components in cascade structures are able to recognize higher order features while broad networks enhanced with the evolved learning components in layered structures can incorporate evidence from large numbers of features.

Bio:

Yong Liu is currently a senior associate professor in the University of Aizu, Japan. He was a lecturer in the State Key Laboratory of Software Engineering, Wuhan University from 1994 to 1999, a researcher fellow at AIST Tsukuba Central 2, National Institute of Advanced Industrial Science and Technology, Japan, from 1999 to 2000, a guest professor in School of Computer, the China University of Geosciences, from 2008 to 2012. He has 120+ publications in the fields of computational intelligence and machine learning, including five papers in IEEE Transactions on Neural Networks, IEEE Transactions on Systems, Man and Cybernetics, and IEEE Transactions on Evolutionary Computation. He is a co-editor for 11 volumes published by Springer. He has been involved in organizing a number of international conferences, including Program Co-Chair of the International Conference on Evolvable Systems: From Biology to Hardware, Program Co-Chair of the 1st International Workshop on Aware Computing, Program Co-Chair of the International Symposium on Intelligence Computation and Applications, and Program Co-Chair of International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2017).

Websites:

https://www.u-aizu.ac.jp/research/faculty/detail?cd=90020&lng=en

Oral Presentation

Saturday, Nov. 18
4:10-6:00PM

Presentation Track A: Machine Learning Algorithm
Presentation Venue: No. 1 Conference (Room A)
Chair: Feng Wang

1. Ontology Sparse Vector Learning Algorithm in Nonlinear Setting
Xin Xin Huang and Shu Gong

2. Reflectance estimation based on locally weighted linear regression methods
De-Jun Lu, Wei-Feng Zhang, Kai-Xuan Cuan and Peng-Fei Liu

2. A Conical Area Differential Evolution with Dual Populations for Constrained Optimization
Bin Wu, Weiqin Ying, Yu Wu, Yuehong Xie and Zhenyu Wang

3. A Dual Internal Point Filter Algorithm Based on Orthogonal Design
Yinjin Yang, Tianyu Huo, Bin Lan and Sanyou Zeng

4. Feature Selection of Network Flow Based on Machine Learning
Taian Xu

5. Research on Localization Scheme of Wireless Sensor Networks Based on TDOA
Xuefeng Yang, Junqi Ma and Yuting Lu

6. Research of Crowed Abnormal Behavior Detection Technology Based on Trajectory Gradient
Kangshun Li, Hongtao Huang, Zebiao Zheng and Yusheng Lu

Oral Presentation

Saturday, Nov. 18
4:10-6:00PM

Presentation Track B: Evolutionary Algorithm
Presentation Venue: No. 1 Conference (Room B)
Chair: Xinyu Zhou

1.Multi-objective Firefly Algorithm guided by Elite Particle
Jiayuan Wang, Li Lv, Zhifeng Xie, Xi Zhang, Hui Wang and Jia Zhao

2. An Adaptive Particle Swarm Optimization using Hybrid Strategy
Peng Shao, Zhijian Wu, Hu Peng, Yinglong Wang and Guangquan Li

3. An Improved Multiobjective Fireworks Algorithm
Dongming Zhan and Chengwang Xie

4. Typical Constrained Optimization Formulation in Evolutionary Computation not Suitable for Expensive Optimization
Sanyou Zeng, Ruwang Jiao, Changhe Li, Bin Lan, Huanhuan Li, Jianqing Sun and Yongzhi Sun

5. Exploring Migration issue based on Multi-Agent Modeling
Pengfei Liu, Xiaxu He, Weifeng Zhang and Enkai Chen

6. A review of the research on the selection path method
Zeping Li, Huwei Liu, Xiaxia Niu, Yan Zhao and Li Zhou

7. A Modified Shuffled Frog Leaping Algorithm for Constructing DNA Codes
Jun Ye, Lei Wang, Huasheng Zhu, Jia Zhao and Min Li

8. Multi-objective Optimal Scheduling of Valves and Hydrants for Sudden Drinking Water Pollution Incident
Chengyu Hu, Lu Zou, Xuesong Yan and Wenyin Gong

9. Yagi-Uda Antenna Design Using Differential Evolution
Hai Zhang, Hui Wang and Cong Wang

Oral Presentation

Saturday, Nov. 18
4:10-6:00PM

Presentation Track B: Evolutionary Algorithm
Presentation Venue: The VIP room on the third floor
Chair: Zhaolu Guo

1. ITO Algorithm with Cooperative Coevolution for Large Scale Global Optimization
   Yufeng Wang, Wenyong Dong, Xueshi Dong

2. A Novel Mutation and Crossover Operator for Multi-objective Differential Evolution
   Qingxia Li and Wenhong Wei

3. An Improved Multiobjective Fireworks Algorithm
   Dongming Zhan and Chengwang Xie

4. Differential Opposition-Based Particle Swarm
   Lanlan Kang, Wenyong Dong

5. A Divisive Multi-level Differential Evolution
   Huifang Zhang, Wei Huang and Jinsong Wang

6. Real-time tracking with multi-center kernel correlation filter
   Zhiqiang Zhao, Zongmin Cui, Lihua Tang, Anyuan Deng and Xiao Yang

7. Improving Energy Demand Estimation Using an Adaptive Firefly Algorithm
   Hui Wang, Zhangxin Chen, Wenjun Wang, Zhijian Wu, Keliu Wu

8. Multi-objective Gene Expression Programming Based Automatic Clustering Method

Ruochen Liu, Jianxia Li and Manman He

9. Evolutionary Design of a Crooked-wire Antenna

Lumin Ye, Bin Lan, Sanyou Zeng, Yi Yuan, Jianqing Sun and Yongzhi Sun

Oral Presentation

Sunday, Nov. 19
10:20-12:00AM

Presentation Track A: Application of Evolutionary Algorithm
Presentation Venue: No. 1 Conference (Room A)
Chair: Dazhi Jiang

1. Design and Implementation of Self-balancing Robot Based on STM32
   Peng Ling and Chunhui Zhou

2. A novel monitor image de-hazing for heavy haze on the Freeway
   Chunyu Xu, Yufeng Wang, Wenyong Dong

3. A Study of Miniaturized Wide-band Antenna Design
   Rui Zhang, Jianqing Sun, Yongzhi Sun, Bin Lan and Sanyou Zeng

4. Human Motion Model Construction Based on Gene Expression Programming
   Wei He, Shaoyang Hu, Shanni Li

5. A Novel Attribute Reduction Approach based on Improved Attribute Significance
   Ye Jun and Wang Lei

6. Maize Gene Regulatory Relationship Mining Using Association Rule
   Jianxiao Liu, Chaoyang Wang, Haijun Liu,Yingjie Xiao, Songlin Hao, Xiao-long Zhang, Jianchao Sun, Huan Yu

7. Fresh-water Fish Quality Traceability System based on NFC Technology
   Longqing Zhang, Lei Yang, Liping Bai, Yanghong Zhang and Kaiming You

Oral Presentation

Sunday, Nov. 19
10:20-12:00

Presentation Track B: Application of Evolutionary Algorithm
Presentation Venue: No. 1 Conference (Room B)
Chair: Sanyou Zeng

1. Optimization of UWB Antenna Based on Particle Swarm Optimization Algorithm
   Mingyuan Yu, Jing Liang, Boyang Qu and Caitong Yue

2. Collaborative filtering considering item life cycle for social media sharing websites
   Yue Liu, Fei Cai, Qi Sun and Zhe Xu

3. Convenient Top-k Location-text Publish/subscribe Scheme
   Hong Zhu, Hongbo Li, Zongmin Cui, Zhongsheng Cao and Meiyi Xie

4. Real-time RGBD object tracking via collaborative appearance and motion models
   Zhanming Liu, Danxian Chen, Hefeng Wu and Jin Zhan

5. A simple chaotic circuit based on meminductor
   Zhiping Tan

6. Hybrid Colliding Bodies Optimization for Solving Emergency Materials Transshipment Model with Time Window
   Xiaopeng Wu, Yongquan Zhou and Qifang Luo

7. Research on coordination fresh Product supply chain under New Retailing Model

Bo Yang and Dongbo Zhang

8. Research on the integrated development model of e-commerce channel and physical retail channel

Sisi Li

9. A Statistical Study of Technological Innovation Factors in Beijing's Low-carbon Economic Growth

Xiaofan Wang and Li Zhou

10. Mutual-Information-SMOTE：A Cost-Free Learning Method for Imbalanced Data Classification

Ying Chen, Yufei Chen, Xianhui Liu and Weidong Zhao

11. Research on evaluation method of service quality

Yan Zhao, Xiaxia Niu and Li Zhou

Oral Presentation

Saturday, Nov. 19
10:20-12:00

Presentation Track B: Data mining and cloud computing
Presentation Venue: The VIP room on the third floor
Chair: Weiqun Ying

1. Lip Password-based Speaker Verification without a Priori Knowledge of Speech Language
   Yiu-Ming Cheung and Yichao Zhou

2. Centralized Access Control Scheme Based on OAuth for Social Networks
   Yue Liu, Fahui Gu, Wei Gao and Jingyun Liao

3. Big-data Cloud Services Platform for growth enterprises with Adaptive Exception Handling and Parallelized Data Mining
   Yazhi Wen, Bo Hu and Bin Wen

4. Assumption queries processing of probabilistic relational databases
   Caicai Zhang, Zongmin Cui and Hairong Yu

5. An Information Filtering Model Based on Neural Network
   Rongrong Li

6. A Prediction Method of Hotspots Knowledge based on Big Data from Evolving Network
   Yi Zhao, Zhao Li and Jun Wu

7. Data-driven phone selection for language identification via bidirectional long short-term memory modeling

Xiao Song, Qiang Cheng, Jingping Xing and Yuexian Zou

8. Multi-Document Summarization via LDA and Density Peaks based Sentence-Level Clustering

Baoyan Wang, Jian Zhang, Jun Jiang, Yi Liu and Yuexian Zou

9. A multi-task learning approach for Mandarin-English code-switching conversational speech recognition

Xiao Song, Yi Liu, Daming Yang and Yuexian Zou

10. A beam search approach based on action space for the two-dimensional rectangular strip packing problem

Aihua Yin, Lei Wang, Dongping Hu, Hao Rao and Song Deng

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路线指引

地址：燕岭大厦(广东省广州市天河区燕岭路 29 号)

路线区间	换乘区间	时间
燕岭大厦 ⟷ 白云国际机场	燕塘站 ⟷ 机场南站	38 分钟
燕岭大厦 ⟷ 火车东站	燕岭大厦 ⟷ 广州火车东站	5 分钟
燕岭大厦 ⟷ 广州火车站	燕塘站 ⟷ 区庄 ⟷ 广州火车站 （换乘 5 号线）	22 分钟
燕岭大厦 ⟷ 广州南站	燕塘站 ⟷ 海珠广场 ⟷ 广州南站 （换乘 2 号线）	52 分钟
燕岭大厦 ⟷ 天河客运站	燕塘站 ⟷ 天河客运站	5 分钟