The 18th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL2017)

Final Program

October 30-November 1, 2017
Guilin, Guangxi, China

Tips

1. Time：October 30-November 1, 2017

2. Venue：Guilin Ronghu Lake Hotel

3. Registration:

  Time：14：00--21：00, Oct. 29　and　08：10--08：50, October. 30

  Location：Guilin Ronghu Lake Hotel

4. Access:

  a、From Guilin Liangjiang Airport: It is 28.6km (about 45 min) distance between the airport and the hotel. You can take the airport shuttle or a taxi to the hotel.

  b、From Guilin Railway Station: It is 2.5km (about 10 min) distance between the Station and the hotel. You can take bus No.22 to Ronghu Lake Hotel bus-station, then walk (about 550m) to the hotel or take a taxi.

  c、From Guilin West Railway Station: It is 14km (about 49 min) distance between the Station and the hotel. You can take bus No.22 to Ronghu Lake Hotel bus-station, then walk (about 550m) to the hotel or take a taxi.

  d、From Guilin North Railway Station It is 8km (about 36 min) distance between the Station and the hotel. You can take bus No.1 to Ronghu Lake Hotel bus-station, then walk (about 700m) to the hotel or take a taxi.

5. Contact Us：Fengying Li：13978393760; Mengyi Qiu: 15578393190

Outline

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Program at a Glance

Time Schedule	30 Oct. 2017 *Monday*	31 Oct. 2017 *Tuesday*	1 Nov. 2017 *Wednesday*
08:10h – 08:50h	Registration and authors' kits (Registration desk open all three days)	Technical Sessions **T1 （8：30-9：30）**	Technical Session **W1 （8：30-9：30）**
08:50h - 09:30h	**Opening**		
09:30h - 10:30h	Plenary Talk **1** **Hojjat Adeli** *Ohio State University*	Plenary Talk **2** **XiZhao Wang** *ShenZhen University*	Tutorial: Language understanding with knowledge graphs **Yanghua Xiao, Deqing Yang, Wanyun Cui** *Fudan University*
10:30h - 11:00h	*Coffee/Tea Break*	*Coffee/Tea Break*	*Coffee/Tea Break*
11:00h - 12:30h	Technical Session **M1**	Technical Session **T2**	Technical Session **W2**
12:30h - 14:00h	*Lunch*	*Lunch*	*Lunch*
14:00h - 16:00h	Technical Session **M2**	Plenary Talk **3** **Xiaoyang (Sean) Wang** *Fudan University* Technical Session **T3**	Technical Session **W3**
16:00h – 16:30h	*Coffee/Tea Break*	*Coffee/Tea Break*	*Coffee/Tea Break*
16:30h – 18:00h	Technical Session **M3**	Technical Session **T4**	**Closing/Social Tour**
18:00h – 18:30h	Free	Free	
18:30h – 21:30h	**Welcome Reception**	**Conference Dinner**	

Notes:

1） Regisration is arranged at the reception hall of No.6 building;

2） All the plenary talks, technical sessions, and tutorial are held in Qiuyunting which is located in the second floor of No.6 building;

3） Guest rooms are distributed in No.5 building or No.6 building;

4） Lunch is all arranged in Yangguangcheng which is located in the first floor of No.6 building;

5） Welcome reception is arranged at Hujingting which is located in the sixth floor of No.5 building;

6） The conference dinner is arranged at Qiuyunting.

备注:

1） 会议报到在 6 号楼的接待大厅；

2） 会议地点在 6 号楼 2 楼秋韵厅；

3） 住宿位于 5 号楼或者 6 号楼；

4） 会议中餐在 6 号楼 1 楼阳光城巴西烧烤餐厅；

5） 30 日欢迎宴在 5 号楼 6 楼的湖景厅；

6） 31 日晚宴在 6 号楼 2 楼的秋韵厅.

Plenary Talks

Plenary Talk 1: Machine Learning and Classification Algorithms

(**Hojjat Adeli**, **Ohio State University, US**)

9:30 -10:30 a.m., Oct. 30

Abstract:

Some of the recent advances in machine learning and classification algorithms are reviewed with a focus on new classification algorithms developed by the author and his associates including the Enhanced Probabilistic Neural Networks (EPNN) of Ahmadlou and Adeli and the Neural Dynamic Classification (NDC) algorithm devel-oped recently by Rafiei and Adeli (2017) based on the robust patented neural dynamics optimization model of Adeli and Park. Recent applications of the Deep Boltzmann Machine (DBM), EPNN, and NDC are presented from both engineering and medical fields such as computer-aided diagnosis of Parkinson's disease, earthquake early warn-ing systems, and damage detection in highrise building structures.

About the Speaker:

Hojjat Adeli received his Ph.D. from Stanford University in 1976 at the age of 26. He has authored over 590 research and scientific publications including 16 books in vari-ous fields of computer science, engineering, applied mathematics, and medicine. In 1998 he received the Distinguished Scholar Award, from The Ohio State University (OSU) "in recognition of extraordinary accomplishment in research and scholarship". He is the recipient of numerous other awards and honors such as the OSU College of Engineering Lumley Outstanding Research Award (quadruple winner); Peter L. and Clara M. Scott Award for Excellence in Engineering Education, and Charles E. MacQuigg Outstanding Teaching Award, a Special Medal from The Polish Neural Network Society in Recognition of Outstanding Contribution to the Development of Computational Intelligence, Eduardo Renato Caianiello Award for Excellence in Scien-tific Research from the Italian Society of Neural Networks and an Honorary Doctorate from Vilnius Gediminas Technical University, Lithuania. He is the Founder and Edi-tor-in-Chief of Computer-Aided Civil and Infrastructure Engineering, now in 32nd year of publication and Integrated Computer-Aided Engineering, now in 25th year of publi-cation. He is also the Editor-in-Chief of International Journal of Neural Systems. He is a Distinguished Member of ASCE, and a Fellow of AAAS, IEEE, AIMBE, and Ameri-can Neurological Association.

Plenary Talk 2: Big Data Learning with Uncertainty

(XiZhao Wang, **ShenZhen University, China)**

09:30 -10:30 a.m., Oct. 31

Abstract:

Big data refers to the datasets that are so large that conventional database management and data analysis tools are insufficient to work with them. Big data has become a bigger-than-ever problem with the quick developments of data collection and storage technologies. Model simplification is one of the most popular approaches to big data processing. After a brief tutorial of the existing techniques of processing big data, this talk will present some key issues of learning from big data with uncertainty, focusing on the impact of handling uncertainty and the challenges uncertainty brings to big data learning. It shows that the representation, measure, and handling of the uncertainty have a significant influence on the performance of learning from big data. Some new advances in our Big Data Institute regarding the research on big data analysis and its applications to different domains are briefly introduced.

About the Speaker:

Prof. Wang's major research interests include uncertainty modeling and machine learning for big data. Prof. Wang has edited 10+ special issues and published 3 monographs, 2 textbooks, and 200+ peer-reviewed research papers. By the Google scholar, the total number of citations is over 5000 and the maximum number of citation for a single paper is over 200. Prof. Wang is on the list of Elsevier 2014/15/16 most cited Chinese authors. As a Principle Investigator (PI) or co-PI, Prof. Wang's has completed 30+ research projects. Prof. Wang is an IEEE Fellow, the previous BoG member of IEEE SMC society, the chair of IEEE SMC Technical Committee on Computational Intelligence, and the Chief Editor of Machine Learning and Cybernetics Journal.

Plenary Talk 3: Supporting Smart Exploratory Data Analysis

(**Xiaoyang (Sean) Wang**, **Fudan University, China**)
14:00 -15:00 p.m., Oct. 31

Abstract:

To achieve desired analysis results, data analysis traditionally repeats the following process: Data analytic professionals work together domain experts to carefully select the data and the analysis models, and then apply analysis tools. With the rapid growth of data volume, and the emergence of new data, applications increasingly need to use "dark data" (or unfamiliar data) in addition to familiar, domain-specific data. At the same time, the demand for data analysis in various areas is increasing rapidly, creating a severe shortage of professional data analysts. As a result, data analysis is experiencing two changes: (1) The data used in analysis is changing from mostly domain-specific data to data from multiple, often unfamiliar, sources; (2) Data analysis practitioners are changing from only computer scientists or statisticians and other technical experts to experts in the application domains. Therefore, how to provide tools that will help user in their analysis tasks has become an important research subject. This talk will discuss the possibility in providing such tools that are collectively called "intelligent data analysis system", and introduce several preliminary attempts.

About the Speaker:

Xiaoyang Sean Wang is Professor at the School of Compute Science of Fudan University. He received his PhD degree in Computer Science from the University of Southern California in 1992. Before joining Fudan University in 2011, he was the Dorothean Chair Professor in Computer Science at the University of Vermont between 2003-2011 and Assistant/Associate Professor in the Department of Information and Software Engineering at George Mason University during 1992-2003, and during 2009-2011, he served as a Program Director at the National Science Foundation in the Division of Information and Intelligent Systems. He has published widely in the general area of databases and information security, and was a recipient of the US National Science Foundation Research Initiation and CAREER awards. His research interests include database systems, information security, data mining, and sensor data processing.

Tutorial: Language understanding with knowledge graphs

(**Yanghua Xiao, Deqing Yang**, Fudan University, China)

9:30 -10:30 a.m., Nov. 1

Abstract:

One of the bottlenecks in machine intelligence is that machines have limited cognitive capability to understand data or text in the form of human language. Recently, with more and more online knowledge bases (also known as knowledge graphs) being published, we have a brand new opportunity to empower machines with the capability to understand natural language. In this tutorial, I will systematically review the recent progress in enabling machines with the cognitive ability to understand natural language and discuss some open problems. Specifically, we will introduce (1) the preliminary concepts of knowledge graphs, (2) the recent process about knowledge graph construction, (3) language understanding models and algorithms based on knowledge graphs, (4) applications empowered with knowledge graphs, such as QA on knowledge base, knowledgeable search and recommendation.

About the Speaker:

Yanghua Xiao got his PHD degree in software theory from Fudan University, Shanghai, China, in 2009. He now is an associate professor of computer science at Fudan University. His research interest includes big data management and mining, graph database, knowledge graph. He won the Best Phd Thesis Nomination of CCF (Chinese Computer Federation)，CCF Natural Science Award (second level), ACM(CCF) Shanghai distinguished young scientists nomination award. Recently, he has published 70+ papers in top-tier international journals and conferences, including TKDE, SIGMOD, VLDB, ICDE, IJCAI, AAAI. He is the PI or Co-PI of 30+ projects supported by 10+ National and Local funding agency and big companies including Microsoft, IBM, HUAWEI, China Telecom, China Mobile, Baidu, XiaoI Robot etc. He regularly serves as the reviewer of 10+ national and local funding agencies and PC members of 50+ top conferences including IJCAI, AAAI, SIGKDD, ICDE, WWW, CIKM, ICDM, SDM etc. He is the Associate Editor of Frontier of Computer Science, and reviewers of 10+ leading journals such as Plos One, IEEE Tansaction on Computers, TKDE. He is a member of ACM, IEEE, AAAI and senior member of CCF. He is the director of Knowledge Works at FUDAN Uni. He built the first knowledge service platform in China (kw.fudan.edu.cn), which serves industries with 200Millions+ API calls. He is the chief scientist or senior advisors of many top Chinese big data companies or AI companies.

Deqing Yang is an associate professor in School of Data Science at Fudan University, who got his Ph.D of Computer Science in 2013 from School of Computer Science at Fudan University. Prof. Yang's main research interests include database and machine learning, especially for knowledge graph with applications to recommender systems and social network mining. Yang's research publications have been recognized by many notable international conferences in data mining and related fields, including ICDM, WWW, ECML, CIKM, DASFAA and etc.

Technical Program

Time Schedule	30 Oct. 2017, Monday
08:10h – 08:50h	*Registration and authors' kits*
08:50h - 09:30h	**Opening**
09:30h - 10:30h **主持人：** Songcan Chen	**Keynote Talk 1: Machine Learning and Classification Algorithms** **Hojjat Adeli,** *Ohio State University*
10:30h - 11:00h	*Coffee/Tea Break*
11:00h - 12:30h **主持人：何倩**	**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* （*Yangguangcheng*）
14:00h - 16:00h **主持人：谢娟英**	**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. Fuzzy 2D-LDA Face recognition Based on Sub-image **ID 58** （*Xingrui Zhang, Yulian Zhu and Xiaohong Chen*） 6. Standardised Reputation Measurement **ID 91** (*Peter Mitic*)

	7. Is a Reputation Time Series White Noise? **ID 92** (*Peter Mitic*) 8. Research on the Method of Splitting Large Class Diagram Based on Multilevel Partitioning **ID 33** （*JinShuai Li, XiaoFei Zhao and BaoShan Sun*）
16:00h – 16:30h	*Coffee/Tea Break*
16:30h – 18:00h 主持人：缪裕青	**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 (Hujingting)**
Time Schedule	**31 Oct. 2017, Tuesday**
08:30h – 09:30h 主持人：谢晓兰	**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 主持人：Yang Gao	**Keynote Talk 2: Big Data Learning with Uncertainty** **XiZhao Wang,** *ShenZhen University*
10:30h - 11:00h	*Coffee/Tea Break*

11:00h - 12:30h 主持人：常亮	**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*） **7.** Markov Random Field Based Convolutional Neural Networks for Image Classification **ID 68** （*Yao Peng and Hujun Yin*）
12:30h - 14:00h	*Lunch* （*Yangguangcheng*）
14:00h - 15:00h 主持人：**Hujun Yin**	**Keynote Talk 3: Supporting Smart Exploratory Data Analysis** **Xiaoyang (Sean) Wang,** *Fudan University*
15:00h - 16:00h 主持人：林熠明	**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 主持人：张敬伟	**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. UK - Means Clustering for Uncertain Time Series Based on ULDTW Distance (Xiaoping Zhu, Zongmin Ma and Qijie Tang） 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(Qiuyunting)**
Time Schedule	**1 Nov. 2017, Wednesday**
08:30h – 09:30h 主持人：刘平山	**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 主持人： **Guoyong Cai**	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 主持人：李凤英	**Technical Session W2: Intelligent Methods** 1. Prediction Learning Effect by Learner's Behavior in MOOCs **ID 90**

	（*Ye Tian, Yimin Wen, Xinhe Yi, Xi Yang and Yuqing Miao*）
	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* （*Yangguangcheng*）
14:00h - 16:00h 主持人：李芳	**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**

Guilin University of Electronic Technology in Brief

Guilin University of Electronic Technology (GUET) is cataloged a key public university of Guangxi which is jointly sponsored by the Ministry of Industry and Information Technology and Guangxi Zhuang Autonomous Region. It is one of the four universities focusing on electronic technology in China. Founded in 1960, with sustainable development, GUET has shaped a multidisciplinary university focusing in engineering-based teaching and featuring electronic information and technology.

Located in the world-famous city of Guilin and Beihai, GUET owns three campuses: Huajiang Campus, Jinjiling Campus and Beihai Campus, covering an area of 1,000 acres. The university now has 22 colleges, covering 7 disciplines in engineering, science, management, economics, liberal arts, law and art. It offers 65 undergraduate programs, 30 postgraduate programs including 139 research directions, and 3 doctorate programs.

GUET possesses over 3000 faculties and staff. Students from different campuses amount to 36,000. Additionally, GUET has built one of the largest libraries in china with 42,000 square meters, 2 million books, 19,000 kinds of Chinese and foreign journals and 71 databases. It designs advanced internet information platforms and excellent environment for learning.

Recently GUET has established good cooperative relationships with more than 160 universities and academic institutions in Asia, Europe, the Americas, Oceania and Africa, building strategic partnerships with 80 universities. Presently, there are 1300 international students from over 20 countries and regions studying in GUET. GUET and UCC (University College Cork) have joined hands to cultivate undergraduates based on Internet Engineering Program. The university provides "China's Government Scholarship" and "Guangxi Government Full Scholarship for ASEAN Students" for international students with doctorate, master, bachelor programs.

School of computer science and information security in Brief

School of computer science and information security of GUET is the earliest unit of computer professional education in Guangxi Provincial. In 1981, undergraduate students began to enroll. In 1996, it began to recruit postgraduates. In 2006, it began to train master for computer engineering. The school has always followed the educational philosophy of "thick foundation, essence theory, good practice, strong ability", guided by the motto of "Learn to be good, and to be new" and the spirit of "Hard work and self-improvement",and adhered to the central task of personnel training. Currently the school has set up a professional chains toward computer architecture, software development, information processing, security control, and intelligent computing. It has not only met the development direction of computer professional education, but also has the characteristics of the development of the road.

There are 118 full-time teachers in the faculty team, among whom 27 are senior teachers, 36 are senior professional titles, 45 are doctoral teachers, and 6 are doctoral tutors. One teacher is in the first batch of "national new century talents project", one teacher in the national model teacher, and 2 people get the State Council special allowance, 1 people rewarded by Guangxi District outstanding experts, 1 by Guangxi outstanding scholars, 3 by talents in Colleges and universities in Guangxi. The school has 1 national teaching teams, 1 teaching teams in Guangxi District, 1 small talent Heights in Guangxi District, and 1 innovative teams in Guangxi District colleges and universities.

The school has 6 undergraduate courses, including computer science and technology, software engineering, information security, Internet of things engineering, intelligent science and technology, information countermeasure technology. Among them, computer science and technology is a national characteristic major, and also one of the second batch of the Ministry of education undergraduate professional excellence engineer education.Currently about 2500 graduate students and 300 post graduate students study in the school.

The school has 3 Guangxi provincial key laboratories which include "Guangxi key lab of trusted software, Guangxi Key Lab of cryptology and information security", "Guangxi Key Lab of intelligent processing of image and graphics".It also has 2 provincial and ministerial level Collaborative Innovation Center which are "networking technology and industrialization" and "cloud computing and big data" ; and it has 2 provincial engineering technology centers which include "Guangxi Cloud Security and cloud services engineering technology research center, "Guangxi location aware and location service engineering research center.

Guilin University of Technology in Brief

Guilin University of Technology (GUT) originated from Guilin geological school, which was established in Guangxi in 1956,through five changes of ownership, and it changed school name for 10 times .1978 it was renamed Guilin metallurgical geology college.1993 it was renamed Guilin institute of technology.2009 it was officially renamed Guilin University of Technology. Chinese academy of engineering, QuJiuHui is appointed for the school reputation principal. There are four campuses with a total area of over 3000 squares.

There are 19 secondary teaching units in the school, 72 undergraduate majors, 50 higher vocational colleges, and 22 regional majors. All kinds of full-time students of over 32,000; Have 2 postdoctoral scientific research, three doctorate authorization center, 16 primary discipline master's degree authorization centers, five professional degree category, recommend excellent fresh graduate subject study for a postgraduate qualification. It has 7 big disciplines about technology, engineering, science, management, law and art.

There are more than 1400 full-time teachers in the school, including 670 senior professional technical staff and 63 doctoral supervisors. The university has "national pacesetter project choice", national "one thousand project", the Chinese academy of sciences, national "one hundred project" scholars ", having made outstanding contribution to the young and middle-aged expert", the national natural science outstanding youth fund gainer, enjoy special government allowances of the state council, experts and the national model teacher outstanding teachers, the ministry of education funding schemes such as national high-level experts, staff 61 people, "BaGui scholars" in guangxi, distinguished experts and scholars, outstanding experts, outstanding teachers, outstanding scientific and technological personnel, "1000 talent project", such as teaching masters in universities in guangxi provincial high-level personnel 64 people.

There are one State Key Laboratory cultivation, one Key Laboratory of Ministry of Education, one Engineering Research Center of Ministry of education, 24 Guangxi key subjects, seven Guangxi Key Laboratories, etc. The Autonomous Regional University Science Park has been established, and it has become a sub Park of Guilin National University Science and Technology Park, and has been recognized as the "demonstration zone of technology transfer in the autonomous region".

In recent years, assume the national and provincial level of more than 2600 scientific research projects, including "973", "863" special plan, the National Natural Science Foundation, the National Social Science Foundation and other national 300 projects, 2016 National Youth Project Zero breakthrough. Since 2013, the total research funding has exceeded 100 million Yuan.

The school has more than 30 countries and regions, more than 100 universities to establish friendly and cooperative relations, with more than 50 universities signed an exchange student, academic exchanges and research cooperation agreement.

College of Information Science and Engineering in Brief

The college of Information Science and Engineering (CISE) of GUT is established in 2009, which grew out of the Applied Physics & Computer Science (established in 1992) and the Electronics & Computer Science (established in 1997). Currently, the college has 91 staff employed, including full-time teachers of 81, and the senior titled of 12, and the sub-senior titled of 30, and 20 with doctor degree.

The college is of solid foundation, possessing the subject category of doctor program (the automation science and engineering), university key subject in Guangxi province(technology of Computer Application), Master's degree program(the computer science &technology and the software engineering), professional degree of "the outstanding engineers plan" by the Ministry of Education (The computer technology) , university key label course in Guangxi province (Embedded technology and intelligent information processing), experimental teaching and demonstration center on district level (Information and manufacturing engineering training center), manufacturing informatization promotion and application center in Guilin city, excellent courses on district level (C language program design and computer networking), and experimental teaching center on school level. The college jointly established more than 20 internship bases with the research institutes and the enterprises.

At present, the college has set up 6 undergraduate majors, including Computer Science and Technology, Electronic Information Engineering, Telecommunication Engineering, Network Engineering, Internet of Things Engineering and Software Engineering. There are more than 2100 students, of whom more than 2000 are undergraduates and the rest are postgraduates. The college has good experimental conditions, with electronic and electrical experimental teaching center, computer experimental teaching center, information and control technology experimental teaching center and computer basic experimental teaching center. The total area of the laboratory is about 2600 square meters, and the total value of all kinds of instruments and equipment is about 28 million yuan.

In recent years, the scientific research work develops rapidly, obtaining a total of 100 research projects, including 15 the national research projects and 51 provincial scientific research projects. The total project fund is about 25 million yuan. The research achievements have won one second prize and three third prize in Guangxi Science and Technology Progress Award. The college published more than 800 papers, including more than 460 papers on core journals, and three major searches taking on more than 300 papers.

Guangxi Teachers Education University in Brief

Guangxi Teachers Education University (GTEU), located in Nanning, the capital city of Guangxi Zhuang Autonomous Region, was founded in 1953 and originally named as Guangxi Teacher Training College. Ratified by China State Council in December 1978, it was upgraded as a province-governed general higher normal institution which practices full-time undergraduate programs. Ratified by the Academic Degrees Committee of the State Council in 1998, GTEU was approved as a Master Degree authorized university. In 2008, GTEU was awarded the Grade of Excellence in the Evaluation on Teaching Outcome of Undergraduate Programs, organized by the China Ministry of Education. In 2013, GTEU was approved to be Guangxi Project Construction Unit for the New Doctor Degree Conferring Unit.

GTEU has three campuses – Mingxiu, Changgang and Wuhe, with an area of 1688.7 mu (about 115 hectares). The total value of teaching and research apparatus and equipment in GTEU is RMB 130,300,000 Yuan while the library stores 2,850,000 books and other publications (including 1,290,000 e-books). GTEU has 21 faculties, six auxiliary teaching units, 43 research institutes, one affiliated demonstrative school and one jointly-run independent college. GTEU now has 12,482 full-time undergraduates, 158 diploma students, 1,146 MA candidates, 148 foreign students and 20,080 students of adult higher education programs.

GTEU sets up 10 discipline categories: Philosophy, Economy, Law, Pedagogy, Literature, History, Sciences, Engineering, Management and Art. It offers 63 undergraduate programs which include four major construction points of higher education institutions of the Ministry of Education, one elaborate major at autonomous region level, one key major at autonomous region level, nine excellent majors of Guangxi higher education institutions, and eight competitive special major construction points of Guangxi higher education institutions. GTEU has 11 master degree authorized units of the first grade disciplines, 43 master degrees authorized units of the second grade disciplines and four professional master degrees authorized units. In 2013, GTEU was granted with the Guangxi government's special financial support for Guangxi Project Construction Unit for the New Doctor Degree Conferring Unit.

Address: No. 175 East Mingxiu Road, Nanning, Guangxi, P.R. China 530001

Website: http://www.gxtc.edu.cn

College of Computer Science and Information Engineering in Brief

College of Computer Science and Information Engineering of GTEU was established in January 2009, integrating the IT specialty resources of majors such as Computer Science and Technology (teachers education), Educational Technology, and so on. After years of construction and development, the college has formed a multi-level school-running system including postgraduate, undergraduate and adult education. The College currently has two master's degree authorization centers: in Computer Science and Technology, and Software Engineering; one master's degree authorization center for secondary disciplines: in Educational Technology; and three undergraduate majors: Computer Science and Technology, Software Engineering, Educational Technology. The College now has more than 1000 students, including 73 graduate students, 725 undergraduate students and more than 200 adult education class students.

There are several key laboratories and research bases, such as "the Talent Base of Scientific Computing and Intelligent Information Processing for Universities in Guangxi"; the Laboratory of Scientific Computing and Intelligent Information Processing which is one of the key laboratories among universities in Guangxi; Jing-Yu Intelligent Information Security Research Base which serves as a key platform of sci-tech innovation for universities in Guangxi to collaborate with local businesses; the Institute of Software; the Institute of Information Security; the Laboratory of Pattern Recognition and Intelligent Systems; the Laboratory of Intelligent Information Processing; and the Studio of Practice and Innovation of Science and Technology for College Students .

Since 2016, Guangxi Teachers Education University-"Sugon Big Data College" is built, as a part of "Data China 'Projects for United of a hundred of Colleges and Universities'" which is a Promotion Plan for Integration of Production and Education, implemented by both National Center for Schooling Development Programme and Sugon Information Industry Co.,Ltd. The colleage is administrated by both enterprise and schools, resources are shared among them and learn from each other. Achieve the goal of talent training in the form of VIP program. According to the regional big data industry application characteristics, human resources demands, cooperate and work out the training program, assessment methods and standards for assessing the quality of the courses together. With the cooperation of scientific researches, and the support from the local governments and also from the enterprises, professional constructions can be deeply rooted in the development of the industry.

Address: No. 3 Hexing Road, Nanning, Guangxi, P.R. China 530299
Website: http://jxxy.gxtc.edu.cn

International Conference on Intelligent Data Engineering and Automated Learning (IDEAL2017)

October 30-November 1 , 2017, Guilin, Guangxi, China

School of Computer Science and Information Security, Guilin University of Technology

1 Jinji Road, Guilin, Guangxi, 541004

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Venue

The venue for IDEAL 2017 conference will be the Ronghu Lake Hotel (Click in), which is located in 16 North Ronghu Road (Ronghu Bei Lu),Guangxi, Guilin, China.
Guilin Ronghu Lake Hotel was founded in 1953 and built in villa style, which is located in bustling downtown Guilin on the west bank of tourist favorite Ronghu Lake. Around the hotel are many extraordinary hills and attractive small lakes, verdant bamboo trees and weeping willows. On the other side of the lake, are the famous scenic spots - the Ancient South City Gate and Thousand-year-old Banyan Tree. It only takes you 10 minutes walking from the hotel to the railway station, with this advantage of geographical location it brings an unique inhabiting experience of nature and comfort but also without losing convenience.

Local Attractions in Guilin

Guilin is a world famous tourist city where there are more than 30 noted scenic spots. Guilin is also a renowned historical and cultural city with 2000 years of history and a famous tourist city, which has a great number of ancient cultural relics.Li River, the most famous river, winds and meanders its way for 170 kilometers, passing through Guilin, Yangshuo to the outlet of Gongchen river in Pingle county and then joins the Xi River, which is the upper reaches of Pearl River. The 83-km-long section from Guilin to Yangshuo has the best scenery and is the masterpiece of Li River, decorated with rolling hills, steep cliffs, fantastic caves, leisurely boats and lined bamboos, which constitute a fascinating hundred-kilometer picture gallery. Gorgeous Karst pinnacles give you surprises at each bend of the limpid river under the blue sky. Its banks are covered with lush bamboo and luxuriantly green woods.

Cuisine

Guilin dishes may be one of the reasons why the people love this city so much. They have an appealing color, aroma, taste and also appearance. All dishes, whether cheap or expensive, are elaborately cooked. The local people prefer spicy and sour so much that most of dishes are served with sour bamboo shoot and sour pepper, and the most famous dishes including Guilin rice nodle, Yangshuo beer fish, and Gongcheng Camellia.

The Location of Ronghu Lake Hotel

桂林市榕湖饭店线路

榕湖饭店距火车站3公里

（1）到火车站或汽车站对面坐22路公共汽车，可直达我店。
（票价：1.0元；时间6：30至21：00）

（2）从火车站汽车站打的，起步价7元/公里（燃油附加费1元），
经中山南路、南门桥、南环路、信义路到达饭店开车需10分钟，
大约需8-10元的士费。

榕湖饭店距机场30公里

（1）从机场乘坐机场大巴（20元/人）到民航大厦，再打的到我店，
大约需8-10元的士费（燃油附加费1元）。

（2）从机场打的，起步价7元/公里，经琴潭路、翠竹路、中山
南路、南门桥、南环路、信义路到达饭店开车需40分钟，大约
需80-100元的士费。

联系电话：（TEL）0773-2827321、2895016（FAX）0773-2822647
地址：桂林市榕湖北路16号

The Plan of Ronghu Lake Hotel

榕湖饭店平面图

1、一号楼 NO.1 BUILDING
2、二号楼 NO.2 BUILDING
3、三号楼 NO.3 BUILDING
4、四号楼 NO.4 BUILDING
5、五号楼 NO.5 BUILDING
6、六号楼 NO.6 BUILDING
7、七号楼 NO.7 BUILDING
8、八号楼、 NO.8 BUILDING
9、九岗岭宴会厅 JIUGANGLIN BANQUET HALL
10、榕湖会议中心 RONGHU CONFERENCE CENTRE
11、市接待办（白崇禧故居）RECEPTION OFFICE OF GUILIN
12、网球场 TENNIS COURT
13、九岗岭会议室 JIUGANGLIN CONFERENCE-ROOM
14、小宴会厅 SMALL BANQUET HALL
15、大门 GATE
16、东门 EAST GATE