

Final Program

IFIP IIP2018

10th IFIP International Conference

On

Intelligent Information Processing

19-22, October, 2018

Nanning, China



Final Program

10th IFIP International Conference on

Intelligent Information Processing (IIP2018)

19-22 October, 2018

Nanning, China

Sponsored by

International Federation for Information Processing, IFIP TC12

Co-Sponsored by

Chinese Association for Artificial Intelligence

Guangxi University

Institute of Computing Technology, Chinese Academy of Sciences

Welcome Address

Dear Colleagues,

This Proceedings comprises of papers accepted the 10th IFIP International Conference on Intelligent Information Processing. As the world proceeds quickly into the Digital Age, it encounters both successes and challenges, and it is well recognized that intelligent information processing provides a key to solve many challenges in the Digital Age. Intelligent Information Processing supports the most advanced techniques that are able to change human life and the world. However, the path to the success is never a straight. Every new technology brings with it many challenging problems, and researchers are in great demand to tackle them. This conference provides a forum for engineers and scientists in research institutes, universities and industries to report and discuss their latest research progresses in all aspects of intelligent information processing.

We received more than 80 papers, of which 37 papers are included in this program as regular papers and 8 as short papers. All papers submitted were reviewed by at least two reviewers. We are grateful for the dedicated work of both authors and reviewers.

A conference such as this cannot succeed without help from many individuals who contributed their valuable time and expertise. We want to express our sincere gratitude to the Program Committee members and referees, who invested many hours for reviews and deliberations. They have provided detailed and constructive review comments that have significantly improved papers' quality included in the proceedings.

We are very grateful to have the sponsorship of the following organizations: IFIP TC12, Guangxi University and Institute of Computing Technology, Chinese Academy of Sciences. We specially thank Cheng Zhong and Zuqiang Meng for organizing the conference and Xin Hong for carefully checking the proceedings.

Finally, we hope you find this volume inspiring and informative. We wish that the research results reported in the proceedings will bear fruits over the years to come.

Zhongzhi Shi
Eunika Mercier-Laurent
Jiuyong Li

August 2018

Conference Organization

Steering Committee

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Organization Committee

Organization Chairs: Cheng Zhong, Guangxi University, China

General Secretary: Zuqiang Meng, Guangxi University, China

Keynotes Speakers

Advances in Transfer Learning

Qiang Yang

Chair Professor at Computer Science and Engineering Department
Hong Kong University of Science and Technology
China.



Abstract. Transfer learning aims to leverage knowledge from existing tasks to solve new tasks. In this talk, I will give an overview of recent advances of transfer learning and point to future works that both have practical significance and theoretical potential.

Bio-Sketch: Qiang Yang is a chair professor at Computer Science and Engineering Department at Hong Kong University of Science and Technology (HKUST). His research interest is transfer learning in AI. His research interests are artificial intelligence, machine learning, data mining and planning. He is a fellow of AAAI, ACM, IEEE, IAPR, AAAS and CAAI. He received his PhD from the Department of Computer Science at the University of Maryland, College Park in 1989 and had been a faculty member at the University of Waterloo between 1989 and 1995. He was a professor and NSERC Industrial Research Chair at Simon Fraser University in Canada from 1995 to 2001. He had been the founding director of the Huawei's Noah's Ark Research Lab between 2012 and 2015 and the founding director of HKUST's Big Data Institute. He was the head of the Computer Science and Engineering Department from 2015 to 2017, and co-founder of the 4th Paradigm Inc. He was the founding Editor in Chief of the ACM Transactions on Intelligent Systems and Technology (ACM TIST) and is currently the founding Editor in Chief of IEEE Transactions on Big Data (IEEE TBD). He has served as a PC Chair or General Chair of several international conferences, including ACM KDD, IJCAI, RecSys, IUI and ICCBR. He received the ACM SIGKDD Distinguished Service Award in 2017, ACM KDDCUP championships in 2004/2005. He is currently the President of IJCAI (2017-2019) and an executive council member of

AAAI.

Grounding & Learning about Human Environments & Activities for Autonomous Robots

Anthony G Cohn

Director of Research and Innovation,

School of Computing,

University of Leeds, Leeds, LS2 9JT, UK.

Distinguished Visiting Professor at Tongji University



Abstract: With the recent proliferation of human-oriented robotic applications in domestic and industrial scenarios, it is vital for robots to continually learn about their environments and about the humans they share their environments with. In this paper, we present a novel, online, incremental framework for $\backslash\text{emph}\{\text{unsupervised}\}$ symbol grounding in real-world, human environments for autonomous robots. We demonstrate the flexibility of the framework by learning about colours, people names, usable objects and simple human activities, integrating state-of-the-art object segmentation, pose estimation, activity analysis along with a number of sensory input encodings into a continual learning framework. Natural language is grounded to the learned concepts, enabling the robot to communicate in a human-understandable way. We show, using a challenging real-world dataset of human activities as perceived by a mobile robot, that our framework is able to extract useful concepts, ground natural language descriptions to them, and, as a proof-of-concept, generate simple sentences from templates to describe people and the activities they are engaged in.

Bio-Sketch: Tony Cohn holds a Personal Chair at the University of Leeds, where he is Professor of Automated Reasoning and Director of Research and Innovation in the School of Computing. He is a Fellow of the Royal Academy of Engineering, and is also a Fellow of AAI, AISB, EurAI (formerly ECCAI; Founding Fellow), the BCS, and the IET. He was Programme Chair of the European AI Conference ECAI-94, KR-98 and COSIT-05, Conference Chair of KR 2000, IJCAI 2003. He is Emeritus Editor-in-Chief of the journal

Artificial Intelligence, and Editor-in-Chief of the journal *Spatial Cognition and Computation*. He has received Distinguished Service awards from IJCAI and AAAI. He is currently a Distinguished Visiting Professor at Tongji University.

Invited Speakers

Artificial Intelligence overview and impacts

Eunika Mercier-Laurent

CRéSTIC, University of Reims Champagne Ardennes

FR-34160 SAINT DREZERY, France

E-mail: eunika@innovation3d.fr



Abstract: The recent craze for AI and limitation to data, deep learning and chatbots cover only a very small part of AI patrimony. Facing various and difficult challenges requires knowing the whole spectrum in aim to select the best approach and techniques. Environmental impact and climate change can be easily faced by right AI and alternative thinking. Smart software (and hardware) conceived using eco-design approach have a potential to reduce our impact and bring a contribution to the Planet protection.

Bio-Sketch: Eunika Mercier-Laurent is electronic engineer, PhD in computer science, expert in artificial intelligence, associate researcher with University Jean Moulin Lyon 3 and University of Reims Champagne Ardennes and Professor of Knowledge & Innovation Management at EPITA and others engineering schools and universities.

After working as researcher in INRIA, computers designer and manager of innovative AI applications with Groupe Bull, she founded Global Innovation Strategies devoted to all aspects of Knowledge Innovation. Among her research topics are: Knowledge and Eco-innovation Management Systems, methods and techniques for innovation, knowledge modelling and processing, complex problem solving, sustainability, eco-design and impacts of artificial intelligence.

Among 100 world experts of Entovation Intl since 1996, she is President of Innovation3D, International Association for Global Innovation, Vice-chair IFIP TC12 Artificial Intelligence, chairman of IFIP TC12.6 (AI for Knowledge Management), expert for EU programs and author of over hundred publications and books.

Deep Learning based Image Interpretation

Lichen Jiao
School of Artificial Intelligence
Xidian University, Xi'an, China



Abstract: With the development of sensor and data storage technology, the data acquisition becomes easier, but it brings “big data” problems, of which, Images are the most common information sources in daily life. Compared with other information sources, the images contain huge amounts of information, and its complexity, redundancy and other characteristics distinguish it from other information sources. The

image processing is relatively difficult, and the human visual system has shown excellent capabilities in image processing, which attracting the attention of many researchers. The application of deep learning model in recent years has made a new progress in the study of deep neural networks and brought a new research boom.

Bio-Sketch: Licheng Jiao received the B.S. degree from Shanghai Jiaotong University, Shanghai, China, in 1982, the M.S. and Ph.D. degrees from Xi'an Jiaotong University, Xi'an, China, in 1984 and 1990, respectively. His research interests mainly include intelligent perception and image understanding, image understanding and object recognition, deep learning and brain-inspired computation. His research results have won the Youth Science and Technology Award, the Second Prize of National Natural Science Award and several provincial-level first Prizes. More than 20 Academic monographs have been published, which have won the National Scientific Book Award 5 times and the first “Three One-hundred” Excellent Book Award. He has published more than 2000 papers and 150 authorized patents, which have around 30200 citations. Evaluated by the Google Scholar, the H-index of his publication is 69.

He is the chairman of IET Xi'an Network, the Xi'an Chapter of IEEE Computational Intelligence Society, the Award Commission of IEEE Xi'an Chapter, and the Xi'an Chapter of

IEEE Geoscience and Remote Sensing Society. He is the Associate Editor of “IEEE Transactions on Geoscience and Remote Sensing”, the Presiding Panelist for the Innovative Team in the Ministry of Education, the member of the Subject Consultative Group of the State Council and the expert of the Undergraduate Teaching Level Evaluation of the Ministry of Education, evaluation expert of the National Natural Science Foundation Information Division, member of the Assessment Panel of National Postdoctoral Management Committees.

He has been receiving special government allowance from the State Council since 1991. In 1996, he was included among the first batch of in the New Century Talents Project (the first and second classes)and the “Three Fives” Talent Project of Shaanxi Province. He was selected as the National Model Teacher by the Ministry of Human Resources and Social Security of China, the Outstanding Contribution Expert of Shaanxi Province.

Is knowledge Engineering out-of-date?

Yueting Zhuang

Dean of College of Computer Science

Zhejiang University, China



Abstract: The world is now in the era of a new wave AI technology. Though, many of us still remembered the days when knowledge Engineering along with expert system was extremely hot, in such a state that is similar to deep learning or machine learning nowadays. This talk will first give a short survey of AI, especially the concept of knowledge Engineering, rule-based expert system, and so on, and then introduce the data-driven machine learning approaches used in systems like Wikipedia, Freebase, Google Knowledge Graph etc. It will conclude that knowledge engineering is NOT out-of-date. What indeed outdated is the method of knowledge acquisition. Finally it will introduce knowledge computing engine in order to support knowledge engineering.

Bio-Sketch: Yueting Zhuang received his B.Sc., M.Sc. and Ph.D. degrees in Computer Science from Zhejiang University, China, in 1986, 1989 and 1998 respectively. From February 1997 to August 1998, he was a visiting scholar at the University of Illinois at Urbana-Champaign. He served as the Dean of College of Computer Science, Zhejiang University from 2009 to 2017, the director of Institute of Artificial Intelligence from 2006 to 2015. Currently, he is a full professor at the College of Computer Science, Director of MOE-Digital Library Engineering Research Center, Zhejiang University.

His research interests mainly include multimedia retrieval, artificial intelligence, cross-media computing, digital library. He has won various awards and honors such as National Science Fund for Distinguished Young Scholars of China from National Natural Science Foundation(2005), the “Chang Jiang Scholars Program” Professor of the Ministry of Education of China(2008), the chief scientist of 973 Project(2012CB316400). He was the leading PI of the digital library project—“China America Digital Academic Library(CADAL)”, which has now become one of the largest non-profit digital libraries in the world. Also he is the director of the technical center of UNESCO Category II---International Knowledge Center of Engineering Science and technology (IKCEST).

Yueting Zhuang now serves as the standing committee member of CAAI, a member of Zhejiang Provincial Government AI Development Committee (AI Top 30)

Effective Utilization of Genomic Data

Yadong Wang

School of Computer Science and Technology

Harbin Institute of Technology, China



Abstract: With the rapid development and wide application of high-throughput genome sequencing technology, a series of large scale international genomics study plans have been carried out. This makes an explosive and continuous growth of genomics data, and the in depth integration of genomics data and healthcare data, which triggers a “data revolution” in life science.

Nowadays, the effective use of genomics data has become an engine critical to the development of life science as well as other related fields such as healthcare, medicine, drug development, etc. Genomics data has large volume, various data structures and complex relationships, which makes it difficult to effectively analyze and utilize. State of the art genomics data analysis technologies can merely dig out 30-50% of the value of the data, i.e., the large potentials of the data cannot be fully realized. This has been one of the biggest challenges to genomics and bioinformatics.

The drawbacks of the existing analysis approaches, including (but not limited to) low sensitivity, low accuracy, low consistency, low efficiency, etc., are the bottlenecks to the effective use of genomics data. It is the main way to solve these problems by developing advanced bioinformatics algorithms, to continuously improve the quality and efficiency of data analysis. Centers for Bioinformatics of Harbin Institute of technology have made great efforts in recent years to develop a batch of innovative genomics data analysis algorithms and systems. These algorithms and systems substantially improve their performances for a series of fundamental genomics data analysis, such as sequencing read alignment, variant calling and genomics big data visualization. With these achievements, several technical bottlenecks have been breakthrough, which make large contributions to the effective use of genomics

Bio-Sketch: Yadong Wang is mainly engaged in bioinformatics, medical informatics, machine learning, artificial intelligence and genome science, the chief scientist of the Heilongjiang Province artificial intelligence industry technology innovation strategic alliance, the national key R & D Program "precision medicine research", the chief scientist of the "China one hundred thousand person genome project", the national biotech The experts of the Expert Committee on the development strategy guidance and the national biotechnology development strategy outline, the expert group, the expert of the 2030 major project of science and technology innovation, the deputy leader of the base platform group and the "13th Five-Year" national key research and development plan "major chronic non communicable disease prevention and control research". Experts of the expert group, expert group of "13th Five-Year" national key research and development plan "research and development of Key Biotechnology for biological safety", and draft expert group on the legislation of China's regulations on the management of genetic resources are drafted by experts. He has been the chief scientist of the National 863 plan biological data project (2014-2017), the expert group expert (2007-2011) of the National 863 plan biology and medicine field (2007-2011), and the expert group (2001-2006) of the National 863 plan bioinformation technology subject group. More than 150 SCI papers have been published, and dozens of big data artificial intelligence systems with the world's leading level have been developed, and have won 1 awards for two national science and technology progress.

Overview of Technical Program

	October 19 Friday	October 20 Saturday					October 21 Sunday	October 22 Monday
8:00-8:30	Registration	Registration					Registration	Social Activity Tour to Nanning International Convention & Exhibition Center, and ASEAN Business District
9:00-10:00	Registration	IIP2018 Opening Ceremony And Plenary Session 1 Place: Landmark Hall(朗悦厅)				Plenary Session 3 Place: Landmark Hall(朗悦厅)		
10:00-10:30	Registration	Coffee Break						
10:30-12:00	Registration	Plenary Session 2 Place: Landmark Hall(朗悦厅)				Plenary Session 4 Place: Landmark Hall(朗悦厅)		
12:30-14:00	Lunch Place: Meet up eat up (友缘小聚, 2层)	Lunch Place: Buddy Fashion restaurant (“朋友来了”自助餐厅, 8层)						Lunch Place: Meet up eat up (友缘小聚, 2层)
14:00-15:30	Registration	Session A1 Machine Learning Place:Langxuan Hall (朗轩厅)	Session B1 Multi-Agent System Place:Langqian Hall (朗乾厅)	Session C1 Natural Language Processing Place:Langkun Hall (朗坤厅)	Session A3 Image Understanding (1) Place:Langxuan Hall (朗轩厅)	Session B3 Social Computing Place:Langqian Hall (朗乾厅)	Session C3 Pattern Recognition Place:Langkun Hall (朗坤厅)	
15:30-16:00	Registration	Coffee Break						
16:00-17:30	Registration	Session A2 Deep Learning Place:Langxuan Hall (朗轩厅)	Session B2 Neural Computing and Swarm Intelligence Place:Langqian Hall (朗乾厅)	Session C2 Recommendation System Place:Langkun Hall (朗坤厅)	Session A 4 Image Understanding (2) Place:Langxuan Hall (朗轩厅)	Session B4 Business Intelligence and Security Place:Langqian Hall (朗乾厅)	Session C4 Place:Langkun Hall (朗坤厅)	
18:00-20:00	Dinner Place: Meet up eat up (友缘小聚, 2层)	Banquet Place:Langqing Hall (朗晴厅, 9层)			Dinner Place: Meet up eat up (友缘小聚, 2层)			Dinner Place: Meet up eat up (友缘小聚, 2层)

Note: all meeting rooms are on Floor 9. (所有会议室均在9层)

Technical Program

Friday October 19, 2018

2:00pm – 5:00pm: Registration

Place: The lobby

6:00pm – 8:00pm: Reception

Saturday October 20, 2018

8:00am – 5:00pm: Registration

9:00am-9:15am: IIP2018 Opening Ceremony

Place: Landmark Hall (朗悦厅)

Chair: Zhongzhi Shi, PC Co-Chair

Xin Yao: Greetings from General Chairs

: Welcome from Guangxi University

Zhongzhi Shi: Introduction to IIP2018 Program

9:15-10:00 Plenary Session 1

Room: Landmark Hall (朗悦厅)

Chair: Xin Yao

Anthony G Cohn: Grounding & Learning about Human Environments & Activities for Autonomous Robots

10:00am-10:30am Coffee Break

10:30am-12:00am: Plenary Session 2

Room: Landmark Hall (朗悦厅)

Chair: Elizabeth Ehlers

Eunika Mercier-Laurent: Artificial Intelligence overview and impacts

Licheng Jiao: Deep Learning based Image Interpretation

12:00pm-1:30pm: Lunch Break

2:00pm– 3:30pm: Parallel Sessions

Session A1: Machine Learning

Room: Langxuan Hall (朗轩厅)

Chair: Shifei Ding

1. Public Opinion Clustering for Hot Event Based on BR-LDA Model
Ni Ningning, Guo Caili and Zeng Zhimin
2. Improved Ensemble Extreme Learning Machine Regression Algorithm
Meiyi Li, Weibiao Cai and Xingwang Liu
3. A K-AP Clustering Algorithm Based on Manifold Similarity Measure
Hongjie Jia, Liangjun Wang, Heping Song, Qirong Mao and Shifei
4. Multi-view Restricted Boltzmann Machines with Posterior Consistency
Nan Zhang, Shifei Ding and Jian Zhang
5. Mass-based Density Peaks Clustering Algorithm
Xiao Xu and Shifei Ding

Session B1: Multi-Agent System

Room: Langqian Hall (朗乾厅)

Chair: Yongquan Zhou

1. Elite Opposition-based Selfish Herd Optimizer
Shengqi Jiang, Yongquan Zhou and Dengyun Wang
2. The Effects of Fixed-Strategy Agents on Local Convention Emergence in Multi-Agent Systems
Tim Borglund, Shuyue Hu and Ho-Fung Leung
3. A multi-agent framework that facilitates decoupled agent functioning
Dave Russell and Elizabeth Ehlers
4. Design and Implementation of smart home cloud system based on Kinect
Xue Bin Tang, Jin Chuang Zhao and Bin Feng

Session C1: Natural Language Processing

Room: Langkun Hall (朗坤厅)

Chair: Jianguo Zhang

1. Short Text Feature Extraction via Node Semantic Coupling and Graph Structures
Huifang Ma, Xiaoqian Liu, Lan Ma and Yulin Hu
2. PWA-PEM for Latent Tree Model and Hierarchical Topic Detection
Zhuchen Liu, Hao Chen, Jie Li and Yanhua Yu
3. Improved Louvain Method for Directed Networks
Lei Li, Xiangchun He and Gh Yan
4. A detail preserving vector median filter based on texture analysis
Ying Pan and Shihui Wang

3:30pm-4:00pm: Coffee Break

4:00pm-5:30pm: Parallel Sessions

Session A2: Deep Learning

Room: Langxuan Hall (朗轩厅)

Chair: Liang Chang

1. Forward Learning Convolutional Neural Network
Hong Hu, Xin Hong, Dan Yang Hou and Zhongzhi Shi
2. A deep learning approach based on CSP for EEG analysis
Wenchao Huang, Jinchuang Zhao and Wenli Fu
3. Automatic driving decision algorithm based on multi-dimensional deep space-time network
Jianguo Zhang
4. Tourist Attraction Recommendation Based on Knowledge Graph
Phatpicha Yochum, Liang Chang, Tianlong Gu, Manli Zhu and Weitao Zhang

Session B2: Neural Computing and Swarm Intelligence

Room: Langqian Hall (朗乾厅)

Chair: Dave Russell

1. Attribute Grid Computer based on Qualitative Mapping and Artificial Neural Network
Jiali Feng
2. A Byproduct of differentiable neural network — data weighting from an implicit form to an explicit form
Tongfeng Sun
3. A Simplex Method-Based Salp Swarm Algorithm for Numerical and Engineering Optimization
Dengyun Wang, Yongquan Zhou and Shengqi Jiang
4. Energy Conservation for Wireless Mesh Networks: A PSO Approach with Throughput-Energy Consumption Scheme Using Solar Energy
Wang Zhe, Li Taoshen, Jin Ye and Ge Zhihui

Session C2: Recommendation System

Room: Langkun Hall (朗坤厅)

Chair: Huifang Ma

1. A Deep Walk-based Approach to Defend Profile Injection Attack in Recommendation System
Xu Gao, Wenjia Niu, Jingjing Liu, Tong Chen, Yingxiao Xiang, Xiao-xuan Bai and Jiqiang Liu
2. An Improved Recommender for Travel Itineraries
Yajie Gu, Jing Zhou and Shouxun Liu
3. Constrained Probabilistic Matrix Factorization with Neural Network for Recommendation System
Gouyong Cai and Nannan Chen
4. Cooperative Filtering Program Recommendation Algorithm Based on User Situations and Missing Values Estimation

Jian Dong, Ruichun Tang and Geqiang Lian

6:00pm-8:00pm: Banquet

Room: Langqing Hall (朗晴厅)

Sunday October 21

9:00-10:00 Plenary Session 3

Room: Landmark Hall(朗悦厅)

Chair: Eunika Mercier-Laurent

Qiang Yang: Advances in Transfer Learning

10:00am-10:30am Coffee Break

10:30am-12:00am: Plenary Session 4

Room: Landmark Hall(朗悦厅)

Chair: Zhong Chen

Yueting Zhuang: Is Knowledge Engineering out-of-date?

Yadong Wang: Effective Utilization of Genomic Data

12:00pm-1:30pm: Lunch Break

2:00pm– 3:30pm: Parallel Sessions

Session A3: Image Understanding (1)

Room: Langxuan Hall (朗轩厅)

Chair: Jiali Feng

1. A Texture Synthesis Steganography Scheme Based on Super-pixel Structure and SVM
Weiwei Wei, Chengfeng A, Lizhao Wang and Huifang Ma
2. The design and implementation of the curved road radar early-warning system
Jun Wen, Guoen Wei and Runfa Zhu
3. Application of skin color model in image segmentation
Wei Wei, Tianyong Li and Jinfu Wei
4. Gait Recognition Based on EMG information with multiple Features
Yueying Cao and Farong Gao

Session B3: Social Computing

Room: Langqian Hall (朗乾厅)

Chair: Zuqiang Meng

1. Towards A Modeling Framework of Social Contexts, Roles and Relations for Acquiring Role-specific Rules
Ya Wang, Zhenzhen Gu, Yuefei Sui and Cungen Cao
2. Microblog Hot Event Detection based on Restart Random Walk and Modularity
Xiaohong Li, Jiheng Gong, Yuyin Ma, Huifang Ma and Na Qin
3. Immersive virtual reality utilizing hand gesture capture as a replacement for traditional controls
Jl Gibson and Duncan Coulter
4. Using System Dynamics for predicting an organization's procurement performance
Mohammad Hassan Abolbashari, Atefe Zakeri and Elizabeth Chang

Session C3: Pattern Recognition

Room: Langkun Hall (朗坤厅)

Chair: Jing Zhou

1. A Replay Speech Detection Algorithm Based on Subband Analysis
Lang Lin, Rangding Wang and Diqun Yan
2. Hybrid Pyramid U-Net Model for Brain Tumor Segmentation
Xiangmao Kong, Guoxia Sun, Qiang Wu, Ju Liu and Fengming Lin
3. Image semantic description based on deep learning with multi-attention mechanisms
Jian Yang
4. Bayesian linear regression model for curve fitting
Michael Li

3:30pm-4:00pm: Coffee Break

4:00pm-5:30pm: Parallel Sessions

Session A4: Image Understanding (2)

Room: Langxuan Hall (朗轩厅)

Chair: Michael Li

1. A Web-based Platform for Segmentation of Abdominal Organs on CT Images
Xiaoxia Ning, Xuejun Zhang and Qianmei Yang
2. An Insider Threat Detection Method based on User Behavior Analysis
Wei Jiang, Yuan Tian and Weixin Liu
3. Obstacle Detection and Tracking Based on Multi-sensor Fusion
Shuyao Cui, Dianxi Shi, Chi Chen and Yaru Kang
4. Non-uniform noise image denoising based on non-local means
Jiixin Li, Jing Hu, Yanfang Wang, Min Wei and Bin Zhang

Session B4: Business Intelligence and Security

Room: Langqian Hall (朗乾厅)

Chair: Mohammad Hassan Abolbashari

1. A Ciphertext-policy Attribute-based Encryption Based on Multi-valued Decision Diagram
Shaowei Zhang, Long Li, Liang Chang, Tianlong Gu and Huadong Liu
2. KPI Data Anomaly Detection Strategy For Intelligent Operation and Maintenance Under Cloud Environment
Xu Youchang, Chen Ningjiang and Huang Ruiwei
3. A Customer Segmentation Model Based on Affinity Propagation Algorithm and Improved Genetic K-means Algorithm
Zhang Zili and Zhang Meiyang
4. Personal Credit Risk Assessment Based on Stacking Ensemble Model
Maoguang Wang , Jiayu Yu, and Zijian Ji

Session C4:

Room: Langkun Hall (朗坤厅)

Chair:

Conference Venue

Hotel Name: Nanning Landmark Hotel (南宁永恒朗悦酒店)

Location: 118 East University Road, Nanning, Guangxi
(广西南宁市大学东路 118 号)

From Nanning Wuxu International Airport (NNG, 南宁吴圩国际机场) to Landmark Hotel:

Option 1: Taxi --- Travel time is about 45 minutes; cost is approximately ¥120; recommended for group of people

Option 2: airport shuttle bus (Line 1) --- cost is ¥20; the bus arrives at Nanning Railway Station (南宁火车站), from where you can take a Taxi, or take the subway (Line 1) to the conference venue. If you take the subway, please get off at Luban Lu Station and take D exit to the hotel (乘地铁 1 号线, 鲁班路站下, D 口出, 即可到达酒店门口).





From Nanning East Railway Station or Nanning Railway Station (南宁火车东站，或南宁火车站) to Landmark Hotel:

Option: take the subway (Line 1) to the conference venue. Please get off at Luban Lu Station and take D exit to the hotel (乘地铁 1 号线，鲁班路站下，D 口出，即可到达酒店门口).

Note that Nanning **East** Railway Station is different from Nanning Railway Station. The former is about 20.5 kilometers away from Landmark Hotel, while the latter 4.5 kilometers.