



# ISKE 2021 The 16<sup>th</sup> International Conference on Intelligent Systems and Knowledge Engineering

## CONFERENCE PROGRAM

Chengdu, China

November 26-28, 2021

Organized by



西南交通大学  
Southwest Jiaotong University



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UNIVERSITY  
OF TECHNOLOGY  
SYDNEY



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CHINESE SOCIETY OF LOGIC

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# WELCOME

ISKE 2021

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Welcome all of you to join the 16<sup>th</sup> International Conference on Intelligent Systems and Knowledge Engineering (ISKE 2021), which is to be held in Chengdu, China during November 26-28, 2021. This conference aims to provide a platform for technical and scientific professionals from academia, research and industries in the fields of intelligent systems and knowledge engineering to exchange knowledge and distribute the emerging state-of-the-art technologies.

After several rounds of review procedure, the program committee accepted the papers to be published in conference proceedings. We wish to express our sincere appreciation to all the individuals who have contributed to the conference. Special thanks are extended to our colleagues in program committee for their thorough review of all the submissions, which is vital to the success of the conference, and also to the members in the organizing committee and the volunteers who had dedicated their time and efforts in planning, promoting, organizing and helping the conference.

This year we are honored to welcome four distinguished keynote speakers: Prof. Bing Liu from University of Illinois at Chicago, USA; Prof. Wenjie Zhang from The University of New South Wales, Australia; Prof. Jie Xu from University of Leeds, UK and Assoc. Prof. Farookh Khadeer Hussain, University of Technology Sydney, Australia.

As one of the organizer of ISKE2021, Southwest Jiaotong University (SWJTU) is one of the earliest institutions of higher engineering education in China. It has become known as "the cradle of railway engineers in China". For over 124 years, Southwest Jiaotong University has by her initiatives made achievements of great consequence and graduated generations of talented young men and women. On record are many of the groundbreaking technologies she spearheaded in China and the world, and more than 300 thousand extraordinarily gifted members she contributed to our society. Her role in the advancement of science and technology and the acceleration of the country's general progress has been most singular and significant. At this historical point of departure, our objective is "to mirror ourselves with the best, to push ourselves to excel, to better integrate our policies with strategies of nationwide development, and to always think and plan ahead."

Wish all conference participants a good experience in the 2-day series of conference sessions.

Enjoy the conference ISKE 2021!

ISKE Organizing Committee  
Chengdu, China | Nov. 26-28, 2021

# AGENDA

ISKE 2021

## November 26, 2021 | Friday

### - ONSITE -

TIME	EVENT	PLACE
10:00-18:00	Onsite Sign-in @ Crowne Plaza Chengdu West	Lobby

### - ONLINE -

TIME	EVENT	ZOOM ID
10:00-12:00	Online Test for Committee Members, Keynotes, Session Chairs etc.	989 9629 0053
	Online Test for Regular Authors	Session 1-8 918 3141 8854
14:00-17:00	Online Test for Committee Members, Keynotes, Session Chairs etc.	989 9629 0053
	Online Test for Regular Authors	Session 9-18 918 3141 8854

#### ONSITE

##### ◆ Crowne Plaza Chengdu West

成都新希望高新皇冠假日酒店

四川省成都市高新西区西芯大道1号



#### ONLINE

##### ◆ Time Zone

China Standard Time (CST), UTC +8

Please set up your laptop time in advance



## November 27, 2021 | Saturday

TIME	ROOM/ZOOM ID	EVENT
<b>Opening Ceremony   Chaired by Prof. Tianrui Li</b>		
09:00-09:10	2F/ 璀璨宴会厅 Diamond Ballroom 998 0436 9652	Welcome Address: <b>Mr. Faming Yao</b> , Southwest Jiaotong University, China
09:10-09:20		Opening Remarks: <b>Prof. Jie Lu</b> , University of Technology Sydney, Australia
09:20-09:30		Program Chair Report: <b>Assoc. Prof. Shuwei Chen</b> , Southwest Jiaotong University, China
<b>Keynote Speech   Chaired by Prof. Jie Lu</b>		
09:30-10:15	2F/ 璀璨宴会厅 Diamond Ballroom 998 0436 9652	Keynote Speech I <b>Prof. Bing Liu</b> , University of Illinois at Chicago, USA Title: Self-Initiated Continual Learning in the Open World
<b>Keynote Speech   Chaired by Prof. Tianrui Li</b>		
10:15-11:00	2F/ 璀璨宴会厅 Diamond Ballroom 998 0436 9652	Keynote Speech II <b>Prof. Wenjie Zhang</b> , The University of New South Wales, Australia Title: Processing Heterogeneous Graphs at Scale: Applications, Challenges and Solutions
<b>11:00-13:20   Lunch</b>		
TIME	ZOOM ID	EVENT
13:20-14:50	998 0436 9652	Session 1- Chaired by Hui Zong
	989 9629 0053	Session 2- Chaired by Yangguang Liu
	918 3141 8854	Session 3- Chaired by Xia He
14:50-16:50	998 0436 9652	Session 4- Chaired by Xingxing He
	989 9629 0053	Session 5- Chaired by Ting Chen
	918 3141 8854	Session 6- Chaired by Keming Wang
<b>16:50-17:00   Break</b>		
TIME	ZOOM ID	EVENT
<b>Keynote Speech   Chaired by Prof. Javier Montero</b>		
17:00-17:45	998 0436 9652	Keynote Speech III <b>Prof. Jie Xu</b> , University of Leeds, UK Title: Acceleration of Pre-trained Models and Applications of Multi-task Learning
<b>Keynote Speech   Chaired by Prof. Jun Liu</b>		
17:45-18:30	998 0436 9652	Keynote Speech IV <b>Assoc. Prof. Farookh Khadeer Hussain</b> , University of Technology Sydney, Australia Title: Advanced Artificial Intelligence-based Approach towards Proactive Risk Management

## November 28, 2021 | Sunday

Parallel Technical Sessions		
TIME	ZOOM ID	EVENT
09:00-10:30	998 0436 9652	Session 7- Chaired by Liuyang Wang
	989 9629 0053	Session 8- Chaired by Li Zou
	918 3141 8854	Session 9- Chaired by Zhiguo Long
<b>10:30-10:50   Break</b>		
10:50-12:20	998 0436 9652	Session 10- Chaired by Hongjun Wang
	989 9629 0053	Session 11- Chaired by Zeng Yu
	918 3141 8854	Session 12- Chaired by Bin Wang
<b>12:20-13:20   Lunch</b>		
Parallel Technical Sessions		
TIME	ZOOM ID	EVENT
13:20-15:20	998 0436 9652	Session 13- Chaired by Jin Gu
	989 9629 0053	Session 14- Chaired by Yanyong Huang
	918 3141 8854	Session 15- Chaired by Chuan Luo
15:20-16:50	998 0436 9652	Session 16- Chaired by Hao Wang
	989 9629 0053	Session 17- Chaired by Hang Yu
	918 3141 8854	Session 18- Chaired by Fengmao Lv
<b>16:50-17:00   Break</b>		
Closing Ceremony   Chaired by Prof. Tianrui Li		
TIME	ZOOM ID	EVENT
17:00-17:30	998 0436 9652	<b>Awards (Best Paper, Best Student Paper)</b> Presented by Luis Martínez López, University of Jaén, Spain
		<b>ISKE2022/FLINS2022 Presentation</b> Given by Qinglin Sun, Nankai University, China



# COMMITTEE

ISKE 2021

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## Steering Committee Chair

Etienne E.Kerre, Ghent University, Belgium

## Steering Committee

Guoqing Chen, Tsinghua University, China

Cengiz Kahraman, Istanbul Technical University, Turkey

Tianrui Li, Southwest Jiaotong University, China

Zhong Li, FernUniversität, Germany

Jun Liu, University of Ulster, UK

Jie Lu, University of Technology Sydney, Australia

Luis Martínez López, University of Jaén, Spain

Javier Montero, Universidad Complutense de Madrid, Spain

Ronei Marcos de Moraes, Federal University of Paraíba, Brazil

Yang Xu, Southwest Jiaotong University, China

Xianyi Zeng, the ENSAIT Textile Institute, France

## General Chairs

Guoqing Chen, Tsinghua University, China

Jie Lu, University of Technology Sydney, Australia

Yang Xu, Southwest Jiaotong University, China

Javier Montero, Universidad Complutense de Madrid, Spain

## Program Chairs

Shuwei Chen, Southwest Jiaotong University, China

Luis Martínez López, University of Jaén, Spain

Tianrui Li, Southwest Jiaotong University, China

Jun Liu, University of Ulster, UK

## Organization Chair

Jie Hu, Southwest Jiaotong University, China

## Publication Chairs

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Xingxing He, Southwest Jiaotong University, China

## Special Session Chairs

Guangquan Zhang, University of Technology Sydney, Australia

Cengiz Kahraman, Istanbul Technical University, Turkey

Min Han, Southwest Jiaotong University, China

# GUIDELINE

ISKE 2021

## Before the conference

### Time Zone

#### Beijing Time (GMT+8)

You're suggested to set up the time on your computer in advance.

### Platform: ZOOM

Download links:

- ◆ <https://zoom.us/download>
- ◆ <https://zoom.com.cn/download> (for Chinese authors)

### Equipment Needed

- ◆ A computer with internet connection and camera
- ◆ Headphone/earphone

### Environment Needed

- ◆ A quiet place
- ◆ Stable internet connection
- ◆ Proper lighting and background

### Test Your Presentation

#### Date: Nov. 26, 2021

Prior to the formal meeting, presenters shall join the test room to ensure everything is on the right track.

## During the conference

### Name

Name yourself with your paper ID + Name

Example: C001+Mary (If you don't have paper, please use your real name to enter the conference)

### Voice Control Rules

- ◆ The host will mute all participants while entering the meeting.
- ◆ The host will unmute the speakers' microphone when it is turn for his or her presentation.
- ◆ Q&A goes after each speaker, the participant can raise hand for questions, and the host will unmute the questioner.
- ◆ After Q&A, the host will mute all participants and welcome next speaker.

### Oral Presentation

- ◆ Timing: a maximum of **15 minutes** in total, including 3 minutes for Q&A. Please make sure your presentation is well timed.
- ◆ It is suggested that the presenter email a copy of his/her video presentation to the conference email box as a backup in case any technical problem occurs.

### Conference Recording

The whole conference will be recorded. We appreciate you proper behavior and appearance.



# KEYNOTE

ISKE 2021

Nov. 27th, 2021

Meeting ID: 998 0436 9652



## Prof. Bing Liu

University of Illinois at Chicago, USA

Time: 09:30-10:15

Bing Liu is a distinguished professor at the University of Illinois at Chicago. He received his Ph.D. in AI from the University of Edinburgh. His current research interests include continual/lifelong learning, sentiment analysis, dialogue systems, natural language processing (NLP), machine learning and data mining. He has published extensively in top conferences and journals and authored four books: one about lifelong machine learning, two about sentiment analysis, and one about Web mining. Three of his papers received Test-of-Time awards and another one received Test-of-Time honorable mention. Some of his works have also been widely reported in the popular press internationally. He served as the Chair of ACM SIGKDD from 2013-2017, as program chair of many leading data mining conferences, and as area/track chair or senior PC member of numerous NLP, AI, Web and data mining conferences. He is the winner of 2018 ACM SIGKDD Innovation Award, and is a Fellow of ACM, AAAI and IEEE.

### Title:

Self-Initiated Continual Learning in the Open World

**Abstract:** As more and more AI agents are used in practice, it is time to think about how to make these agents fully autonomous so that they can learn by themselves in a self-motivated and self-supervised manner rather than being retrained periodically on the initiation of human engineers using expanded training data. As the real-world is an open environment with unknowns or novelties, detecting novelties or unknowns, gathering ground-truth training data, and incrementally or continually learning the unknowns make the agent more and more knowledgeable and powerful over time. The key challenge is how to automate the process so that it is carried out on the agent's own initiative and through its own interactions with humans and the environment. Since an AI agent usually has a performance task, characterizing each novelty becomes necessary so that the agent can formulate an appropriate response to adapt its behavior to cope with the novelty and to learn from it to improve its future responses and task performance. This talk will present a framework for this learning paradigm to promote the research of building self-initiated open world continual learning agents.

# KEYNOTE

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Nov. 27th, 2021

Meeting ID: 998 0436 9652



## Prof. Wenjie Zhang

The University of New South Wales, Australia

Time: 10:15-11:00

Wenjie Zhang is a Professor, ARC Future Fellow, and Deputy Head of School (Research) in the School of Computer Science and Engineering, the University of New South Wales Australia. Her research interests lie in developing efficient (e.g., real-time) and scalable techniques for data intensive applications. She has published over 180 research papers in leading international journals and conferences. Her research has been supported by 9 Australian Research Council funded projects and several industry projects. Wenjie serves as an Associate Editor for IEEE Transactions on Knowledge and Data Engineering, a senior PC or track chair for VLDB 2022, CIKM 2021 / 2019 / 2015, and ICDE 2019, and organization committee member or PC member for more than 50 international conferences. Wenjie is the recipient of the prestigious CORE Chris Wallace Research Award in 2019. Her works receive the ACM SIGMOD Research Highlight Award 2021, one of the Best Papers in SIGMOD 2020, ICDE 2013/2012/2010, and several Best (Student) Paper Awards from international conferences.

### Title:

Processing Heterogeneous Graphs at Scale: Applications, Challenges and Solutions

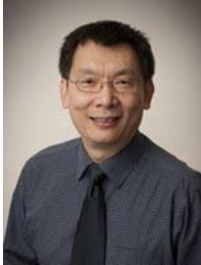
**Abstract:** With the advent of a wide spectrum of recent applications, processing heterogeneous graphs has received a great deal of attention from both academic and industry societies. Heterogeneous graphs involve objects (vertices) and links (edges) that are classified into multiple types; examples include bibliography networks, knowledge networks, and user-item networks in E-business. Structure-based analysis reveals the underlying connections and is an important task in processing heterogeneous graphs. However, the large scale and dynamic nature pose great challenges for efficient and scalable processing. This talk will focus on representative path-based and subgraph-based search models over large-scale dynamic heterogeneous graph processing, and discuss the applications, challenges and solutions.

# KEYNOTE

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Meeting ID: 998 0436 9652



## Prof. Jie Xu

**University of Leeds, UK**

Jie Xu is Chair of Computing at the University of Leeds, Director of the UK White Rose Grid e-Science Centre, involving the three White Rose Universities of Leeds, Sheffield and York, and Head of the Distributed Systems and Services (DSS) Theme at Leeds. Xu has worked in the field of Distributed Computing Systems for over thirty-five years, engaging closely with industrial leaders such as Alibaba, BAE Systems, JLR, and Rolls-Royce. He received a PhD in Computing Science from the University of Newcastle upon Tyne, and was Professor of Distributed Systems at the University of Durham before joined Leeds in 2003.

Professor Xu is an executive member of UKCRC (UK Computing Research Committee) and an awarded Turing Fellow in AI and Data Science. He has served as an academic expert of governments and industries, including Singapore IDA, Lenovo, UK EPSRC Peer Review College, and UK DTI and EPSRC. He is an associate editor of ACM Computing Surveys and was an editor of IEEE Distributed Systems, acting as editor/guest editor for several international journals. He is a Steering Committee member for IEEE SRDS, IEEE ISORC, IEEE HASE, IEEE SOSE, and IEEE BigDataService etc, on the executive board of IEEE TC on BIS, and General Chair/PC Chair of numerous IEEE international conferences. Professor Xu has had over 300 academic publications, including papers in world-leading IEEE and ACM Transactions, received international research prizes (e.g. BCS/AT&T Brendan Murphy Prize), and led or co-led more than 20 research projects worth over £25M. He is the co-founder of two university's spin-outs that specialise in data analytics and AI software for maximising data centre performance and in co-simulation and digital twins.

**Title:**

Acceleration of Pre-trained Models and Applications of Multi-task Learning

**Abstract:** This talk reports our latest experience with speeding up pre-trained DNN models through fine-grained GPU parallelism and introduces an application of multi-task learning for predicting passengers' demands.

# KEYNOTE

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## Assoc. Prof. Farookh Khadeer Hussain

University of Technology Sydney, Australia

Time: 17:45-18:30

Farookh Khadeer Hussain is currently an Associate Professor with the School of Software, University of Technology Sydney. He is also an Associate Member of the Advanced Analytics Institute and a Core Member of the Centre for Artificial Intelligence. His key research interests include trust-based computing, cloud of things, blockchains, and machine learning. He has published widely in these areas in top journals, such as FGCS, the Computer Journal, JCSS, the IEEE Transactions on Industrial Informatics, and the IEEE Transactions on Industrial Electronics.

### Title:

Advanced Artificial Intelligence-based Approach towards Proactive Risk Management

**Abstract:** Risk management is one of the critical activities that need to be done well to ensure the success of an operation. The first step in risk management is risk identification, in which the risk manager identifies the risk events of interest for further analysis. Undertaking this step manually, however, is tedious and time-consuming. With the increased sophistication and capability of advanced computing algorithms, artificial intelligence techniques to increase the efficiency and efficacy of this step needs to be adapted. In this talk, we demonstrate how reinforcement learning, which is one of the recent artificial intelligence techniques, can assist risk managers in identifying the risks to their operations proactively. We further emphasise that while complex machine learning models predict the contributing features leading to a risk outcome, they are primarily black-box in their working nature. This limitation has sparked interest in interpretable machine learning, where glass-box methods provide a contemporary mechanism for explaining the contributing features towards a predicted risk outcome. In this talk, we also explain how Knowledge Graphs combined with System Dynamics and Bayesian network modelling assists the risk manager to determine the chain of features contributing to a risk outcome over a time period.

# SESSIONS

ISKE 2021

## Parallel Technical Sessions on Nov. 27th

13:20 -14:50	<p align="center"><b>Session 1 - AI, Logic and Parallel Computing</b> Meeting ID: 998 0436 9652</p>
<b>Session Chair: Hui Zong</b>	
<p><b>K262830</b> 13:20-13:35</p>	<p><b>Dynamic Rule Activation Method Based on Activation Factor for Extended Belief Rule-based Systems</b>  <b>Author(s):</b> Tianyu Ren, Feifei Ye, Longhao Yang, Jun Liu, Yanyan Wang  <b>Presenter:</b> Tianyu Ren  <b>Affiliation:</b> Fuzhou University</p>
<p><b>K262897</b> 13:35-13:50</p>	<p><b>A Feasible System of Automatic Flame Detection and Tracking for Fire-Fighting Robot</b>  <b>Author(s):</b> Yongqi Hao, Xiaoming Liu, Guofang Huang  <b>Presenter:</b> Yongqi Hao  <b>Affiliation:</b> NARI Technology Co., Ltd</p>
<p><b>K2628111</b> 13:50-14:05</p>	<p><b>A Parallel Circuit Design of Chien Search and Forney Algorithm</b>  <b>Author(s):</b> Jingxuan Tan, Liguozhang, Xingjin Li, Yingzhao Hui, Jiahui Ma, Shengfei Bai  <b>Presenter:</b> Jingxuan Tan  <b>Affiliation:</b> Xi'an University of Posts and Telecommunications</p>
<p><b>K2628167</b> 14:05-14:20</p>	<p><b>Design of Parallel Algorithm of Transfer Learning Based on Weak Classifier</b>  <b>Author(s):</b> Zong Hui, Tian Guanqun, Zhao Qiankun, Hong Long  <b>Presenter:</b> Hui Zong  <b>Affiliation:</b> Huaiyin Institute of Technology</p>
<p><b>K262841</b> 14:20-14:35</p>	<p><b>DeepPRFM: Pairwise Ranking Factorization Machine Based on Deep Neural Network Enhancement</b>  <b>Author(s):</b> Chenchen Sun, Ningning Zhou, Long Hong, Lihong Jiao  <b>Presenter:</b> Chenchen Sun  <b>Affiliation:</b> Nanjing University of Posts and Telecommunications</p>
<p><b>K262875</b> 14:35-14:50</p>	<p><b>A Language for Performance Evaluation Based on the Combination of CTRLML and MMTD and its Algorithm</b>  <b>Author(s):</b> Fujun Wang, Zining Cao, Shuya Wang, Hui Zong, Weiwei Lu  <b>Presenter:</b> Fujun Wang  <b>Affiliation:</b> Huaiyin Institute of Technology</p>

# SESSIONS

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13:20 -14:50	<b>Session 2 - Artificial Intelligence (AI) in Finance and FinTech</b> <b>Meeting ID: 989 9629 0053</b>
<b>Session Chair: Yangguang Liu</b>	
<b>K262887</b> 13:20-13:35	<b>Financial Trading with Feature Preprocessing and Recurrent Reinforcement Learning</b> <b>Author(s):</b> Lin Li <b>Presenter:</b> Lin Li <b>Affiliation:</b> Southern University of Science and Technology
<b>K262893</b> 13:35-13:50	<b>Financial Time Series Prediction Using Generative Adversarial Network Based on Gaussian Graph Model</b> <b>Author(s):</b> Xin Li, Yangguang Liu, Chen Huang, Xingyu Zhou <b>Presenter:</b> Xin Li <b>Affiliation:</b> Ningbo University of Finance and Economics
<b>K2628102</b> 13:50-14:05	<b>Hybrid Filter-Wrapper Feature Selection using Water Wave Optimization Algorithm for Financial Crisis Prediction in Enterprises</b> <b>Author(s):</b> Xueqin Lu, Wenda He, Qingqing Lu, Yan Tang <b>Presenter:</b> Xueqin Lu <b>Affiliation:</b> Ningbo University of Finance & Economics
<b>K2628103</b> 14:05-14:20	<b>Research on Evaluation Methods of Ningbo Sci-tech Innovation Work</b> <b>Author(s):</b> Yuyue Chen, Longjin Lv <b>Presenter:</b> Yuyue Chen <b>Affiliation:</b> Ningbo University of Finance & Economics
<b>K2628139</b> 14:20-14:35	<b>Intelligent Inspection Method of Transmission Line Robot Based on Tower Image Registration and Object Tracking</b> <b>Author(s):</b> Xuan Jiang, Zhicheng Wu, Guofang Huang, Bin Zhang <b>Presenter:</b> Xuan Jiang <b>Affiliation:</b> NARI Group Corporation (State Grid Electric Power Research Institute)
<b>K2628140</b> 14:35-14:50	<b>A Method of Point Cloud Processing in Transformer Substation</b> <b>Author(s):</b> Xingjun Zhou, Guofang Huang, Jing Zhang, Chao Shan, Xiaoming Liu, Yuhui Tong <b>Presenter:</b> Xingjun Zhou <b>Affiliation:</b> NARI Technology Co., Ltd

## SESSIONS

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13:20 -14:50	<b>Session 3 - Logic, Computation and Artificial Intelligence (I)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Xia He</b>	
<b>K2628149</b> 13:20-13:35	<b>A Logic Study of NL Fuzzy Degree</b> <b>Author(s):</b> Xia He, Jie Hua, Chunmei Wang, Tingshu Hu, Long Hong <b>Presenter:</b> Xia He <b>Affiliation:</b> Nanjing University of Posts and Telecommunications
<b>K2628177</b> 13:35-13:50	<b>Notes on the Architecture, League Training and PFSP in AlphaStar</b> <b>Author(s):</b> Jianyang Zhao, Ningning Zhou, Long Hong <b>Presenter:</b> Jianyang Zhao <b>Affiliation:</b> Nanjing University of Posts and Telecommunications
<b>K2628144</b> 13:50-14:05	<b>Automatic Construction of Femoral Statistical Model by Clustering Method</b> <b>Author(s):</b> Geyang Du, Jungang Han, Jiantao Li, Hao Zhang, Jianrong Zhao <b>Presenter:</b> Geyang Du <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628151</b> 14:05-14:20	<b>Feature Selection using Forest Optimization Algorithm Based on Multi-ethnic Strategy</b> <b>Author(s):</b> Yinfu Liang, Jianhua Liu <b>Presenter:</b> Yinfu Liang <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262855</b> 14:20-14:35	<b>Dominance Matrix of Hypergraph and Its Application in Cyclic Graph Judgement</b> <b>Author(s):</b> Runqing Xu, Shengling Geng, Banghe Han, Ruize Wu <b>Presenter:</b> Runqing Xu <b>Affiliation:</b> Qinghai Normal University
<b>K262861</b> 14:35-14:50	<b>Attribute Reduction of Linguistic-Valued Layered Concept Lattice</b> <b>Author(s):</b> Min Sun, Lu Che, Shihui Wang, Hongdong Wang, Li Zou <b>Presenter:</b> Min Sun <b>Affiliation:</b> Liaoning Normal University



# SESSIONS

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14:50 -16:50	<b>Session 4 - Logic, Computation and Artificial Intelligence (II)</b> <b>Meeting ID: 998 0436 9652</b>
<b>Session Chair: Xingxing He</b>	
<b>K262874</b> 14:50-15:05	<b>Automatic Generation of Test Cases of Multi-agent Systems Based on Model Checking</b> <b>Author(s):</b> Weijian Tang, Keming Wang <b>Presenter:</b> Weijian Tang <b>Affiliation:</b> Southwest Jiaotong University
<b>K262802</b> 15:05-15:20	<b>Traffic Sign Classification Based on Prototypes</b> <b>Author(s):</b> Hao Fu, Hongjun Wang <b>Presenter:</b> Hao Fu <b>Affiliation:</b> Karlsruhe Institute of Technology
<b>K262852</b> 15:20-15:35	<b>Extending E Prover with Fully Use Binary Clauses Algorithm Based on Standard Contradiction Separation Rule</b> <b>Author(s):</b> Peiyao Liu, Guanfeng Wu, Yang Xu, Feng Cao <b>Presenter:</b> Peiyao Liu <b>Affiliation:</b> Southwest Jiaotong University
<b>K262895</b> 15:35-15:50	<b>Improving CSE-F 1.0 Prover with Importance Measure Based Literal Selection Strategy</b> <b>Author(s):</b> Guoyan Zeng, Yang Xu, Guanfeng Wu, Feng Cao <b>Presenter:</b> Guoyan Zeng <b>Affiliation:</b> Southwest Jiaotong University
<b>K262823</b> 15:50-16:05	<b>Formalization and Verification of Cyclic Group</b> <b>Author(s):</b> Yue Tang, Yang Xu, Peiyao Liu, Guoyan Zeng <b>Presenter:</b> Guoyan Zeng <b>Affiliation:</b> Southwest Jiaotong University
<b>K2628104</b> 16:05-16:20	<b>Research on the Breach of Contract of Graduates from the Project of the Training Plan for High-Level Minority Talents in China</b> <b>Author(s):</b> Ming Jiang, Yi Shi, Manwen Huang <b>Presenter:</b> Ming Jiang <b>Affiliation:</b> Southwest Minzu University

# SESSIONS

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<p><b>K262879</b> 16:20-16:35</p>	<p><b>Multi-view Spatial-temporal Adaptive Graph Convolutional Networks for Traffic Forecasting</b>  <b>Author(s):</b> Zhirong Duan, Yan Yang, Wei Zhou  <b>Presenter:</b> Zhirong Duan  <b>Affiliation:</b> Southwest Jiaotong University</p>
<p><b>K2628173</b> 16:35-16:50</p>	<p><b>Spark Performance Optimization Analysis with Multi-layer Parameter using Shuffling and Scheduling with Different Data Caching Options</b>  <b>Author(s):</b> Deleli Mesay Adinew, Zhou Shijie, Ayall Tewodros Alemu  <b>Presenter:</b> Deleli Mesay Adinew  <b>Affiliation:</b> University of Electronic Science and Technology of China</p>
<p><b>14:50 - 16:50</b></p>	<p><b>Session 5 - Applications of Big Data and Data Science</b>  <b>Meeting ID: 989 9629 0053</b></p>
<p><b>Session Chair: Liuyang Wang</b></p>	
<p><b>K262821</b> 14:50-15:05</p>	<p><b>A Proximal Regularized Landweber Iteration Method for Electrical Impedance Tomography</b>  <b>Author(s):</b> Hongyu Qi, Hongsun Fu, Zhuoyue Wang  <b>Presenter:</b> Hongyu Qi  <b>Affiliation:</b> Dalian Maritime University</p>
<p><b>K2628112</b> 15:05-15:20</p>	<p><b>An Improved Self-Corrected Min-sum Decoding for LDPC Codes</b>  <b>Author(s):</b> Xingjin Li, Liguozhang, Jingxuan Tan, Jiahui Ma, Yingzhao Hui, Shengfei Bai  <b>Presenter:</b> Xingjin Li  <b>Affiliation:</b> Xi'an University of Posts and Telecommunications</p>
<p><b>K262845</b> 15:20-15:35</p>	<p><b>Fault Diagnosis Model of Switching Power Supply Based on Improved DBN</b>  <b>Author(s):</b> Lei Zhou, Cheng Yu, Hu Liu, Xin Li, Fenfen Li, Haiyan Zhang  <b>Presenter:</b> Lei Zhou  <b>Affiliation:</b> Huaiyin Institute of Technology</p>
<p><b>K262851</b> 15:35-15:50</p>	<p><b>Study on Potability Water Quality Classification Based on Integrated Learning</b>  <b>Author(s):</b> Fenfen Li, Lei Zhou, Ting Chen  <b>Presenter:</b> Lei Zhou  <b>Affiliation:</b> Huaiyin Institute of Technology</p>

# SESSIONS

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<b>K262869</b> 15:50-16:05	<b>Fast Division Algorithm for Finite Real Number</b> <b>Author(s):</b> Ting Chen, Fenfen Li, Jinbao Lin <b>Presenter:</b> Ting Chen <b>Affiliation:</b> Huaiyin Institute of Technology
<b>K262866</b> 16:05-16:20	<b>Determination of 3-Ary A-resolution in LP(X)</b> <b>Author(s):</b> Hairui Jia, Yang Xu, Yi Liu <b>Presenter:</b> Hairui Jia <b>Affiliation:</b> China Academy of Finance Research, Zhejiang University of Finance and Economics
<b>K2628136</b> 16:20-16:35	<b>Fuzzy Logic Systems for the Weakest Uninorm</b> <b>Author(s):</b> Minxia Luo, Hongyan Shi <b>Presenter:</b> Minxia Luo <b>Affiliation:</b> China Jiliang University
<b>K262818</b> 16:35-16:50	<b>Two-Way Delay Compensation Mechanism Based on Full-Load Delivery</b> <b>Author(s):</b> Fachao Li, Juan Wang, Lei Zhou <b>Presenter:</b> Juan Wang <b>Affiliation:</b> Hebei University of Science and Technology
<b>14:50 -17:05</b>	<b>Session 6 - Practical Applications of AI and Knowledge Engineering (I)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Keming Wang</b>	
<b>K262854</b> 14:50-15:05	<b>Facial Expression Recognition Method Based on Multi-scale Efficient Channel Attention Mechanism</b> <b>Author(s):</b> Peng Zhang, Weiwei Kong <b>Presenter:</b> Peng Zhang <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262864</b> 15:05-15:20	<b>Detection Capability Prediction Based on Broad Learning System During The COVID-19 Pandemic</b> <b>Author(s):</b> Junyan Lin, Minghao Tan, Yufan Zheng, Kaihan Wu, Choujun Zhan <b>Presenter:</b> Minghao Tan <b>Affiliation:</b> Nanfang College, Guangzhou

# SESSIONS

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<p><b>K262859</b> 15:20-15:35</p>	<p><b>Mutli-source Information Fusion with Gated Temporal Convolutional Network for Transmission Line Icing Tension Prediction</b>  <b>Author(s):</b> Yi Wen, Jianrong Wu, Huan Huang, Jinqiang He, Yongli Liao, Ruihai Li  <b>Presenter:</b> Jinqiang He  <b>Affiliation:</b> Electric Power Research Institute, CSG</p>
<p><b>K2628122</b> 15:35-15:50</p>	<p><b>Feature Selection Based on Gain Ratio in Hybrid Incomplete Information Systems</b>  <b>Author(s):</b> Jiazheng Chen, Jingjing Hu, Gangqiang Zhang  <b>Presenter:</b> Jiazheng Chen  <b>Affiliation:</b> Guangxi University for Nationalities</p>
<p><b>K2628123</b> 15:50-16:05</p>	<p><b>Dependency-based Unsupervised Feature Selection in Fuzzy Rough Set</b>  <b>Author(s):</b> Liang Peng, Linlin Wang, Gangqiang Zhang  <b>Presenter:</b> Liang Peng  <b>Affiliation:</b> Guangxi University for Nationalities</p>
<p><b>K2628142</b> 16:05-16:20</p>	<p><b>Automatic Measurement of Femoral Neck-Shaft Angle Based on CT Scan Data</b>  <b>Author(s):</b> Jiayu Yang, Jungang Han, Li Zhe, Pei Yang, Pengyu Zhan, Enming Li  <b>Presenter:</b> Jiayu Yang  <b>Affiliation:</b> Xi'an University of Posts and Telecommunications</p>
<p><b>K262846</b> 16:20-16:35</p>	<p><b>Attribute Reduction for Incomplete and Unsupervised Data Based on Fuzzy Rough Sets</b>  <b>Author(s):</b> Linlin Wang, Liang Peng, Gangqiang Zhang  <b>Presenter:</b> Linlin Wang  <b>Affiliation:</b> Guangxi University for Nationalities</p>
<p><b>K2628101</b> 16:35-16:50</p>	<p><b>Bibliometric Analysis of AI Policy Evolution over Ten Years in China</b>  <b>Author(s):</b> Chao Yang, Cui Huang, Tong Zhang  <b>Presenter:</b> Chao Yang  <b>Affiliation:</b> Zhejiang University</p>
<p><b>K262829</b> 16:50-17:05</p>	<p><b>Modelling Non Linear Preferences in Consensus Reaching Processes--A Sustainability Application</b>  <b>Author(s):</b> Diego García-Zamora, Álvaro Labella, Rosa M. Rodríguez, Luis Martínez López  <b>Presenter:</b> Diego García-Zamora  <b>Affiliation:</b> University of Jaén, Spain</p>

# SESSIONS

ISKE 2021

## Parallel Technical Sessions on Nov. 28

09:00 -10:30	<b>Session 7 - Knowledge Engineering and Management (I)</b> <b>Meeting ID: 998 0436 9652</b>
<b>Session Chair: Liuyang Wang</b>	
<b>K2628127</b> 09:00-09:15	<b>Embedding Knowledge Graphs into Multi-vector Space</b> <b>Author(s):</b> Xi Cao, Fusheng Yu <b>Presenter:</b> Xi Cao <b>Affiliation:</b> Beijing Normal University
<b>K2628121</b> 09:15-09:30	<b>A Hybrid Prediction Method Based on MODWT-EMD for Time Series in Wireless Sensor Networks</b> <b>Author(s):</b> Zhongmin Wang, Jingwen Jia, Cong Gao, Yanping Chen, Hong Xia <b>Presenter:</b> Jingwen Jia <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262831</b> 09:30-09:45	<b>A Practical and Secure Certificateless Signcryption for Privacy-Preserving Scheme in Healthcare Management System</b> <b>Author(s):</b> Lansana Balde, Jiashu Zhang, Ahmed Elkhilil, Otabek Khudayberdiev <b>Presenter:</b> Lansana Balde <b>Affiliation:</b> Southwest Jiaotong University
<b>K262835</b> 09:45-10:00	<b>Visualization Analysis of Spatiotemporal Data of COVID-19</b> <b>Author(s):</b> Liuyuan Cui, Weiwei Kong <b>Presenter:</b> Liuyuan Cui <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262863</b> 10:00-10:15	<b>Economic Data Prediction Based on Time Series Analysis</b> <b>Author(s):</b> Chenchao Zhu, Yaya Liu, Lu Wang, Jing Lu <b>Presenter:</b> Chenchao Zhu <b>Affiliation:</b> University of Shanghai for Science and Technology
<b>K262862</b> 10:15-10:30	<b>Research on Text Summarization Generator Method Based on Input Text Linguistic Features and Copy Mechanism</b> <b>Author(s):</b> Liuyang Wang, Yangxin Yu <b>Presenter:</b> Liuyang Wang <b>Affiliation:</b> Huaiyin Institute of Technology

# SESSIONS

ISKE 2021

Nov. 28th, 2021

09:00 -10:30	<b>Session 8 – Machine Learning &amp; Data Mining</b> <b>Meeting ID: 989 9629 0053</b>
<b>Session Chair: Li Zou</b>	
<b>K262860</b> 09:00-09:15	<b>A Bidirectional Learning Method in the Fuzzy Linguistic Formal Context</b> <b>Author(s):</b> Hongliang Zheng, Shihui Wang, Min Sun, Meiqiao Sun, Li Zou <b>Presenter:</b> Shihui Wang <b>Affiliation:</b> Liaoning Normal University
<b>K262890</b> 09:15-09:30	<b>Business Intelligence, Based on the Ralph Kimball Methodology, for Decision-Making in General Management</b> <b>Author(s):</b> Alexander Aguilar-Chávez, Jeshuá Banda-Barrientos, Michael Cabanillas-Carbonell <b>Presenter:</b> Jeshuá Banda-Barrientos <b>Affiliation:</b> Universidad Privada del Norte
<b>K2628105</b> 09:30-09:45	<b>Computational Task Offloading Scheme Based on Deep Learning for Financial Big Data</b> <b>Author(s):</b> Zhonglin Wang, Changjuan Zheng <b>Presenter:</b> Zhonglin Wang <b>Affiliation:</b> Ningbo University of Finance and Economics
<b>K2628106</b> 09:45-10:00	<b>Estimating Learner's Perspective in Programming: Analysis of Operation Time Series in Code Puzzles</b> <b>Author(s):</b> Hiroki Ito, Hiromitsu Shimakawa, Fumiko Harada <b>Presenter:</b> Hiroki Ito <b>Affiliation:</b> Ritsumeikan University
<b>K262868</b> 10:00-10:15	<b>Improving the Question Answering Quality using Answer Candidate Filtering based on Natural-Language Features</b> <b>Author(s):</b> Aleksandr Gashkov, Aleksandr Perevalov, Maria Eltsova, Andreas Both <b>Presenter:</b> Aleksandr Perevalov <b>Affiliation:</b> Anhalt University of Applied Sciences
<b>K2628180</b> 10:15-10:30	<b>Prime Filters of QMV*-Algebras</b> <b>Author(s):</b> Yingying Jiang, Wenjuan Chen <b>Presenter:</b> Wenjuan Chen <b>Affiliation:</b> University of Jinan

# SESSIONS

ISKE 2021

Nov. 28th, 2021

09:00 -10:30	<b>Session 9 - Artificial Intelligent Methodology and System (I)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Zhiguo Long</b>	
<b>K2628160</b> 09:00-09:15	<b>Trajectory Anomaly Detection with Multi-feature and Multi-resolution Based on Direction Grouping</b> <b>Author(s):</b> Jiangbo Guo, Zhixiang Zhu, Chenwu Wang, Pei Wang, Rongyao Xu, Gen Hou <b>Presenter:</b> Jiangbo Guo <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628161</b> 09:15-09:30	<b>A Novel Algorithm of Tube Association and Rearrangement in Multi-camera Video Synopsis</b> <b>Author(s):</b> Gen Hou, Zhixiang Zhu, Chenwu Wang, Pei Wang, Qi Tian, Yuting Wang <b>Presenter:</b> Gen Hou <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628162</b> 09:30-09:45	<b>Cross Domain Authentication Based on Blockchain for Mobile Terminals in Edge Computing Environment</b> <b>Author(s):</b> Lin Yang, Jianhua Liu <b>Presenter:</b> Lin Yang <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628164</b> 09:45-10:00	<b>Intelligent Transaction Model Of Agricultural Supply Chain Based on Blockchain</b> <b>Author(s):</b> Wangwang Liu, Jianhua Liu <b>Presenter:</b> Wangwang Liu <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628165</b> 10:00-10:15	<b>Linux Network Situation Prediction Model Based on eBPF and LSTM</b> <b>Author(s):</b> Xiangzhe Zhang, Zhaoyuan Liu, Jiaqing Bai <b>Presenter:</b> Xiangzhe Zhang <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628166</b> 10:15-10:30	<b>Research and Design of TCP Intelligent Congestion Control Strategy Based on Network State Classification</b> <b>Author(s):</b> Xu Dong, Zhaoyuan Liu <b>Presenter:</b> Xu Dong <b>Affiliation:</b> Xi'an University of Posts and Telecommunications



# SESSIONS

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10:50 -12:20	<b>Session 10 - Artificial Intelligent Methodology and System (II)</b> <b>Meeting ID: 998 0436 9652</b>
<b>Session Chair: Hongjun Wang</b>	
<b>K2628158</b> 10:50-11:05	<b>A Video Synopsis Method For Object Interactive Preservation Combined with Face Orientation</b> <b>Author(s):</b> Qi Tian, Zhixiang Zhu, Chenwu Wang, Pei Wang, Jiangbo Guo, Yuting Wang <b>Presenter:</b> Qi Tian <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628126</b> 11:05-11:20	<b>Kernel Principal Component Analysis Pseudoinverse Learning Algorithm</b> <b>Author(s):</b> Huanan Pu, Fusheng Yu <b>Presenter:</b> Huanan Pu <b>Affiliation:</b> Beijing Normal University
<b>K2628130</b> 11:20-11:35	<b>NUMA-Aware Contention Scheduling on Multicore Systems</b> <b>Author(s):</b> Dongsheng He, Lijun Chen, Jinrong Liang, Chunmei Kang, Jiaqin Bai <b>Presenter:</b> Dongsheng He <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628132</b> 11:35-11:50	<b>COVID-19's Impact on the Box office: Machine Learning and Difference-in-Difference</b> <b>Author(s):</b> Yufan Zheng, Qiaoling Zhen, Minghao Tan, Haoran Hu, Choujun Zhan <b>Presenter:</b> Qiaoling Zhen <b>Affiliation:</b> Nanfang College, Guangzhou
<b>K2628135</b> 11:50-12:05	<b>Research and Implementation of the Method of Perceiving Distance between UHF Band Passive RFID and Tag Groups Indoors</b> <b>Author(s):</b> Honggang Wang, Mengyuan Liu, Junying Jia, Ruoyu Pan <b>Presenter:</b> Mengyuan Liu <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628143</b> 12:05-12:20	<b>Channel Attention-based Adaptive Near Infrared Spectral Deep Residual Network for Palmprint Image Recognition</b> <b>Author(s):</b> Xuebin Xu, Xiaomin Xing, Kan Meng <b>Presenter:</b> Xiaomin Xing <b>Affiliation:</b> Xi'an University of Posts and Telecommunications

# SESSIONS

ISKE 2021

Nov. 28th, 2021

10:50 -12:20	<b>Session 11 - Practical Applications of AI and Knowledge Engineering (II)</b> <b>Meeting ID: 989 9629 0053</b>
<b>Session Chair: Zeng Yu</b>	
<b>K262898</b> 10:50-11:05	<b>Improved ViBe Algorithm for Defect Detection of the Etching Lead Frame Mould</b> <b>Author(s):</b> Wanyu Deng, Shuqi Ye, Hao Li <b>Presenter:</b> Shuqi Ye <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262883</b> 11:05-11:20	<b>Meta-analysis of Xiaochaihu Decoction in the Treatment of Cancer Fever</b> <b>Author(s):</b> Lei Xu, Lijun Jiang, Ruixiao Kong, Hairui Jia, Limin Du, Yaxue Wang, Xiaoran Hui <b>Presenter:</b> Limin Du <b>Affiliation:</b> Henan University
<b>K262884</b> 11:20-11:35	<b>Meta-analysis of Atomized Inhalation of Budesonide Salbutamol Combined with Ipratropium Bromide in Treatment of Bronchial Asthma</b> <b>Author(s):</b> Limin Du, Yaxue Wang, Junhan Cao, Lei Xu, Xiaoran Hui, Lijun Jiang <b>Presenter:</b> Limin Du <b>Affiliation:</b> Henan University
<b>K262803</b> 11:35-11:50	<b>Credit Grade Prediction Based on Decision Tree Model</b> <b>Author(s):</b> Jiexian You, Guolan Li, Hongjun Wang <b>Presenter:</b> Jiexian You <b>Affiliation:</b> Chongqing University of Technology
<b>K2628124</b> 11:50-12:05	<b>Selecting and Comparing Temporal-spatial Features for Traffic Incident Detection</b> <b>Author(s):</b> Huansong Zhang, Youngjun Shen, Qikai Qu <b>Presenter:</b> Huansong Zhang <b>Affiliation:</b> Southeast University
<b>K262889</b> 12:05-12:20	<b>A Multi-label Feature Selection Method Combining Graph and Matrix Coupling Decomposition</b> <b>Author(s):</b> Yunfei Liu, Hongmei Chen <b>Presenter:</b> Yunfei Liu <b>Affiliation:</b> Southern University of Science and Technology

# SESSIONS

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Nov. 28th, 2021

10:50 -12:20	<b>Session 12 - Artificial Intelligent Methodology and System (III)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Bin Wang</b>	
<b>K262891</b> 10:50-11:05	<b>Transfer Visual Semantics into Knowledge Graph for Zero-Shot Recognition in Universal Datasets</b> <b>Author(s):</b> Beibei Yu, Yujin Wang, Hongxin Xiang, Cheng Xie <b>Presenter:</b> Beibei Yu <b>Affiliation:</b> Yunnan University
<b>K262896</b> 11:05-11:20	<b>Linux Storage IO Important Parameters Filtering Model Based on Random Forest</b> <b>Author(s):</b> Zhangpin Sun, Lijun Chen <b>Presenter:</b> Zhangpin Sun <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628108</b> 11:20-11:35	<b>Composing Approximations from Distribution Data under A Fuzzy Relation</b> <b>Author(s):</b> Shaoyong Li, Lin Yu, Zhiyong Hong, Xinglin Liu <b>Presenter:</b> Shaoyong Li <b>Affiliation:</b> Wuyi University
<b>K2628116</b> 11:35-11:50	<b>Unbalanced Data Classification Algorithm Based on Hybrid Sampling and Ensemble Learning</b> <b>Author(s):</b> Mengfei Wu, Ximing Li <b>Presenter:</b> Mengfei Wu <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628117</b> 11:50-12:05	<b>Remaining Useful Life Prediction of Lithium Battery via Neural Network Ensemble</b> <b>Author(s):</b> Hengshan Zhang, Di Wu, Zhongmin Wang, Yanping Chen, Jiaxuan Xu <b>Presenter:</b> Di Wu <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628118</b> 12:05-12:20	<b>ERGAN-High Perform GAN for Eyeglasses Removal</b> <b>Author(s):</b> Mengyuan Cheng, Xiaopeng Cao <b>Presenter:</b> Mengyuan Cheng <b>Affiliation:</b> Xi'an University of Post & Telecommunications

# SESSIONS

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13:20 -15:20	<b>Session 13 - Artificial Intelligent Methodology and System (IV)</b> <b>Meeting ID: 998 0436 9652</b>
<b>Session Chair: Jin Gu</b>	
<b>K262810</b> 13:20-13:35	<b>Formal Modeling and Verification of Multi-agent System Based on Timed Automata</b> <b>Author(s):</b> Xia Wang, Yang Xu, Peiyao Liu <b>Presenter:</b> Peiyao Liu <b>Affiliation:</b> Southwest Jiaotong University
<b>K262825</b> 13:35-13:50	<b>A Framework for Feature Construction Based on Neighborhood Rough Set</b> <b>Author(s):</b> Yang Chen, Xin Yang, Jiani Zheng, Wei Wang <b>Presenter:</b> Xin Yang <b>Affiliation:</b> Southwestern University of Finance and Economics
<b>K2628168</b> 13:50-14:05	<b>Expression Recognition Based on Image Fusion and Transfer Learning</b> <b>Author(s):</b> Lisha Yang, Hailiang Zhao, Yi Tang <b>Presenter:</b> Lisha Yang <b>Affiliation:</b> Southwest Jiaotong University
<b>K262877</b> 14:05-14:20	<b>A Logic for Iterated Belief Revision</b> <b>Author(s):</b> Hua Meng, Zhiguo Long, Yong Wang, Bin Xing, Hui Zhang <b>Presenter:</b> Hua Meng <b>Affiliation:</b> Southwest Jiaotong University
<b>K2628128</b> 14:20-14:35	<b>Towards Robust Qualitative Spatio-temporal Reasoning for Hybrid AI Systems</b> <b>Author(s):</b> Michael Sioutis, Hua Meng <b>Presenter:</b> Hua Meng <b>Affiliation:</b> Southwest Jiaotong University
<b>K262886</b> 14:35-14:50	<b>On Large-Scale Qualitative Spatio-temporal Constraint Redundancy Removal</b> <b>Author(s):</b> Qiyuan Hu, Yang Gao, Zhiguo Long, Hongjun Wang, Tianrui Li, Michael Sioutis <b>Presenter:</b> Qiyuan Hu <b>Affiliation:</b> Southwest Jiaotong University
<b>K262878</b> 14:50-15:05	<b>Particle Swarm Optimization for Clustering Ensemble</b> <b>Author(s):</b> Yu Zheng, Zhiguo Long, Chuanyang Wei, Hongjun Wang <b>Presenter:</b> Zhiguo Long <b>Affiliation:</b> Southwest Jiaotong University

# SESSIONS

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<b>K262816</b> 15:05-15:20	<b>Metric Learning with Feature Embedding for Segmentation Quality Evaluation</b> <b>Author(s):</b> Huixiang Chen, Bo Peng, Zaid Al-Huda, Xiaofan Li <b>Presenter:</b> Huixiang Chen <b>Affiliation:</b> Southwest Jiaotong University
<b>13:20 -15:20</b>	<b>Session 14 - Artificial Intelligent Methodology and System (V)</b> <b>Meeting ID: 989 9629 0053</b>
<b>Session Chair: Yanyong Huang</b>	
<b>K262842</b> 13:20-13:35	<b>Execution Time Optimization of Workflow Network with Activity Lead-Time</b> <b>Author(s):</b> Xiaoping Qiu, Binci You, Yue Hu <b>Presenter:</b> Binci You <b>Affiliation:</b> Southwest Jiaotong University
<b>K262888</b> 13:35-13:50	<b>NonupleCLMR : Contrastive Learning of Musical Representation with NonupleMIDI</b> <b>Author(s):</b> Jinhong Miao, Yan Yang <b>Presenter:</b> Jinhong Miao <b>Affiliation:</b> Southwest Jiaotong University
<b>K262808</b> 13:50-14:05	<b>K-Means Clustering with Fairness Constraints</b> <b>Author(s):</b> Weiting Xu, Jie Hu, Shengdong Du, Yan Yang <b>Presenter:</b> Weiting Xu <b>Affiliation:</b> Southwest Jiaotong University
<b>K2628133</b> 14:05-14:20	<b>Three-Level and Three-Way Vagueness Similarity Measurements for Electrocardiogram (ECG) Data Analysis</b> <b>Author(s):</b> Xianyong Zhang, Xiaoxue Wang, Zhiwen Mo, Qian Wang, Xiao Tang <b>Presenter:</b> Xiaoxue Wang <b>Affiliation:</b> Sichuan Normal University
<b>K262812</b> 14:20-14:35	<b>Segmentation Quality Evaluation Algorithm Based on Classification</b> <b>Author(s):</b> Ting Feng, Bo Peng, Zaid Al-Huda, Hao Jia <b>Presenter:</b> Ting Feng <b>Affiliation:</b> Southwest Jiaotong University

# SESSIONS

ISKE 2021

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<b>K2628170</b> 14:35-14:50	<b>Applying B and ProB to a Real-World Data Validation Project</b> <b>Author(s):</b> Peng Cheng, Keming Wang <b>Presenter:</b> Peng Cheng <b>Affiliation:</b> Southwest Jiaotong University
<b>K262876</b> 14:50-15:05	<b>Calibration Data Prediction of Wind Tunnel Balance Based on Regression Tree</b> <b>Author(s):</b> Tao Ma, Lei Miao, Yikun Du, Hongjun Wang <b>Presenter:</b> Tao Ma <b>Affiliation:</b> China Aerodynamics Research & Development Center
<b>K262837</b> 15:05-15:20	<b>Weakly-Supervised Salient Object Detection through Object Segmentation Guided by Scribble Annotations</b> <b>Author(s):</b> Xiongying Wang, Zaid Al-Huda, Bo Peng <b>Presenter:</b> Xiongying Wang <b>Affiliation:</b> Southwest Jiaotong University
<b>13:20 -15:20</b>	<b>Session 15 - Artificial Intelligent Methodology and System (VI)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Chuan Luo</b>	
<b>K262840</b> 13:20-13:35	<b>Sentence Semantic Matching Model Based on Fusing Local and Global Features</b> <b>Author(s):</b> Pengcheng Liu, Linfu Sun <b>Presenter:</b> Pengcheng Liu <b>Affiliation:</b> Southwest Jiaotong University
<b>K2628179</b> 13:35-13:50	<b>Hierarchical Feature Selection via Large Margin Nearest Neighbor</b> <b>Author(s):</b> Jian Zheng, Chuan Luo, Tianrui Li, Hongmei Chen <b>Presenter:</b> Jian Zheng <b>Affiliation:</b> Sichuan University
<b>K2628129</b> 13:50-14:05	<b>A Robust Method for Simultaneous Unsupervised Feature Selection and Clustering</b> <b>Author(s):</b> Naichuan Zhang, Yanyong Huang <b>Presenter:</b> Naichuan Zhang <b>Affiliation:</b> Southwestern University of Finance and Economics

# SESSIONS

ISKE 2021

Nov. 28th, 2021

<b>K2628125</b> 14:05-14:20	<b>Opposition-based Grey Wolf Optimization Approaches for Feature Selection</b> <b>Author(s):</b> Zhi Cao, Hongmei Chen <b>Presenter:</b> Zhi Cao <b>Affiliation:</b> Southwest Jiaotong University
<b>K262857</b> 14:20-14:35	<b>Discriminant Feature Selection via Minimizing the Minority-Emphasis Regularization to Within-Class Matrix for Imbalanced Data</b> <b>Author(s):</b> Shuhao Huang, Hongmei Chen <b>Presenter:</b> Shuhao Huang <b>Affiliation:</b> Southwest Jiaotong University
<b>K262899</b> 14:35-14:50	<b>Robust Multi-label Feature Selection via Low-Dimensional Embedding and Manifold Regularization</b> <b>Author(s):</b> Haohan Lu, Hongmei Chen <b>Presenter:</b> Haohan Lu <b>Affiliation:</b> Southwest Jiaotong University
<b>K262806</b> 14:50-15:05	<b>A Novel Hybrid Grey Wolf Optimizer and Its Application to Feature Selection</b> <b>Author(s):</b> Tianyi Li, Hongmei Chen <b>Presenter:</b> Hongmei Chen <b>Affiliation:</b> Southwest Jiaotong University
<b>K262836</b> 15:05-15:20	<b>HCSA: A Novel Feature Selection Method Based on Improved Crow Search Algorithm</b> <b>Author(s):</b> Tianyi Li, Hongmei Chen <b>Presenter:</b> Hongmei Chen <b>Affiliation:</b> Southwest Jiaotong University
<b>15:20 -16:50</b>	<b>Session 16-Artificial Intelligent Methodology and System (VII)</b> <b>Meeting ID: 998 0436 9652</b>
<b>Session Chair: Hao Wang</b>	
<b>K262811</b> 15:20-15:35	<b>Semi-supervised Multi-label Feature Selection using Hessian Energy Based on Maximum Relevance And Minimum Redundancy</b> <b>Author(s):</b> Xinping Wu, Hongmei Chen, Hao Chen, Tianrui Li, Chuan Luo <b>Presenter:</b> Hongmei Chen <b>Affiliation:</b> Southwest Jiaotong University



# SESSIONS

ISKE 2021

Nov. 28th, 2021

<b>K262814</b> 15:35-15:50	<b>Document-Level Event Argument Extraction via Multispan Semantic Reinforcement</b> <b>Author(s):</b> Dong Qiu, Haixia Wang <b>Presenter:</b> Haixia Wang <b>Affiliation:</b> Chongqing University of Posts and Telecommunication
<b>K262822</b> 15:50-16:05	<b>Local Learning Joint with the Adaptive Graph for Subspace Representation</b> <b>Author(s):</b> Yangbo Wang, Can Gao, Jie Zhou, Zhihui Lai <b>Presenter:</b> Yangbo Wang <b>Affiliation:</b> Shenzhen University
<b>K262839</b> 16:05-16:20	<b>MRI and SPECT Image Fusion using Saliency Capturing</b> <b>Author(s):</b> Weiwei Kong, Yang Lei, Liuyuan Cui, Chi Li, Jiawei Xue <b>Presenter:</b> Weiwei Kong <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K2628141</b> 16:20-16:35	<b>Detection Model of Nasolaryngology Lesions Based on Multi-scale Contextual Information Fusion and Cascading Mixed Attention</b> <b>Author(s):</b> Xiaoying Pan, Xingxing Liu, Weidong Bai, Minjie Ma <b>Presenter:</b> Xingxing Liu <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262844</b> 16:35-16:50	<b>Negative Samples-Enhanced Graph Convolutional Neural Networks</b> <b>Author(s):</b> Wei Duan, Junyu Xuan, Jie Lu <b>Presenter:</b> Wei Duan <b>Affiliation:</b> University of Technology Sydney
<b>15:20 -16:50</b>	<b>Session 17 - Artificial Intelligent Methodology and System (VIII)</b> <b>Meeting ID: 989 9629 0053</b>
<b>Session Chair: Hang Yu</b>	
<b>K262870</b> 15:20-15:35	<b>Information Measurements in Dual Hesitant Fuzzy Granular Computing Model</b> <b>Author(s):</b> Yanxia Wei, Qinghai Wang <b>Presenter:</b> Yanxia Wei <b>Affiliation:</b> Qinghai Normal University

# SESSIONS

ISKE 2021

Nov. 28th, 2021

<b>K2628148</b> 15:35-15:50	<b>A Review of Learning-based E-Commerce</b> <b>Author(s):</b> Sihan Yin, Xudong Luo <b>Presenter:</b> Sihan Yin <b>Affiliation:</b> Guangxi Normal University
<b>K2628169</b> 15:50-16:05	<b>Predicting Video Game Sales Based on Machine Learning and Hybrid Feature Selection Method</b> <b>Author(s):</b> Jianbin Li, Yufan Zheng, Haoran Hu, Junhui Lu, Choujun Zhan <b>Presenter:</b> Jianbin Li <b>Affiliation:</b> Nanfang College, Guangzhou
<b>K262849</b> 16:05-16:20	<b>A Survey of Learning-based Methods for Cold-Start, Social Recommendation, and Data Sparsity in E-Commerce Recommendation Systems</b> <b>Author(s):</b> Sihan Yin, Xudong Luo <b>Presenter:</b> Sihan Yin <b>Affiliation:</b> Guangxi Normal University
<b>K2628113</b> 16:20-16:35	<b>Euclidean and Rapid Jacobian-based Saliency Maps Attacks</b> <b>Author(s):</b> Ling Yue, Yong Zhang, Pengfei Wei <b>Presenter:</b> Ling Yue <b>Affiliation:</b> Xi'an University of Posts and Telecommunications
<b>K262856</b> 16:35-16:50	<b>Lifting Up Imbalanced Data Classification to SVM Based Ensemble Level on Oversampling Feature Spaces</b> <b>Author(s):</b> Jin Zhang, Shitong Wang <b>Presenter:</b> Jin Zhang <b>Affiliation:</b> Jiangnan University
<b>15:20 -16:50</b>	<b>Session 18 - Knowledge Engineering and Management (II)</b> <b>Meeting ID: 918 3141 8854</b>
<b>Session Chair: Fengmao Lv</b>	
<b>K2628120</b> 15:20-15:35	<b>A Novel Clustering Algorithm via the Support and K-Nearest Neighbors of Data</b> <b>Author(s):</b> Hengshan Zhang, Xiaoyan Liu, Jiaxuan Xu, Haoru Li, Zhongmin Wang, Yanping Chen <b>Presenter:</b> Hengshan Zhang <b>Affiliation:</b> Xi'an University of Posts and Telecommunications

# SESSIONS

ISKE 2021

Nov. 28th, 2021

<b>K262807</b> 15:35-15:50	<b>Using 2-Tuple Linguistic Model for Multi-source Set-Valued Information Fusion</b> <b>Author(s):</b> Feifei Yang, Pengfei Zhang <b>Presenter:</b> Feifei Yang <b>Affiliation:</b> Guangxi University of Finance and Economics
<b>K262809</b> 15:50-16:05	<b>An Overlapping Community Detection Algorithm Based on Density Peaks and Label Propagation</b> <b>Author(s):</b> Chuanwei Li, Hongmei Chen, Tianrui Li <b>Presenter:</b> Hongmei Chen <b>Affiliation:</b> Southwest Jiaotong University
<b>K262850</b> 16:05-16:20	<b>Nearest-Neighbor Modified Constructive Covering Oversampling Method</b> <b>Author(s):</b> Haoran Shen, Yifei Jiang, Yuanting Yan <b>Presenter:</b> Yuanting Yan <b>Affiliation:</b> School of Computer Science and Technology Anhui University
<b>K2628145</b> 16:20-16:35	<b>Aspect-based Sentiment Analysis with a Position-Aware Multi-head Attention Network</b> <b>Author(s):</b> Jing Wan, Ling Sun <b>Presenter:</b> Jing Wan <b>Affiliation:</b> Beijing University of Chemical Technology
<b>K2628154</b> 16:35-16:50	<b>Musical Noise Reduction Method Based on MMSE Combined with Wiener Filtering</b> <b>Author(s):</b> Qiujuan Tong, Huan Han, Lu Huang, Jun Wang <b>Presenter:</b> Huan Han <b>Affiliation:</b> Xi'an University of Posts and Telecommunications

17:00 - 17:30

**Closing Ceremony**  
Meeting ID: 998 0436 9652

Chair: Tianrui Li

**Awards (Best Paper, Best Student Paper)**

Presented by Luis Martínez López, University of Jaén, Spain

**ISKE2022/FLINS2022 Presentation**

Given by Qinglin Sun, Nankai University, China

# | ABOUT SWJTU

Southwest Jiaotong University (SWJTU) was founded to train China's own railway engineers. Since our early days, we have been cultivating talents for the rejuvenation of Chinese nation and persevering in self-improvement with the motto "Diligence, Ambition, Tenacity and Loyalty". By training our graduates to master cutting-edge technologies and to strive for excellence, we have been shaping the development of China's rail transit industry from the beginning. We have more than 300,000 graduates whose ideas, innovations and actions have generated a positive impact in China and the world.

As an outstanding academic community, it has always been our mission to serve the country and the world through scientific education, research, and innovation, to solve fundamental scientific problems and to meet the challenges of today and tomorrow.

SWJTU is situated in Chengdu, Sichuan's capital, and is known as the home of the beloved Panda Bear. Our hometown, a "garden city" is regarded as one of the metropolitan cities with the highest quality of life in China. Furthermore, since it is a key node city along the "Belt and Road", SWJTU is well positioned to adopt a global vision, with partners, cooperation projects, and alumni spanning the globe. Our growing scientific community attracts talents from all over the world and our students have opportunities to study, research, and work with outstanding and multidisciplinary teachers, alumni, and partners. Both rigorous and dynamic, the academic environment provides outstanding opportunities for the integration of theory and practice. As a member of the innovative, cooperative, and multidisciplinary community at SWJTU, you will have the chance to work in a community that serves as a key node of the Belt and Road Initiative, address the greatest global engineering challenges of today, and make a positive impact on the field of higher education with us. In addition, you can experience and enjoy our welcoming culture, highly praised by our international guests and visitors.



