

2023 26th International Conference on Computer Supported Cooperative Work in Design (CSCWD 2023)

May 24-26, 2023, Rio de Janeiro, Brazil

<http://2023.cscwd.org/>

Preliminary Program

Conference Venue: JW Marriot Hotel, Rio de Janeiro, Brazil

Satellite Conference Site: Kunming, China

Zoom Conference ID: to be provided to registered attendees

Program in Rio de Janeiro

Tuesday May 23, 2023

17:30 – 19:00	Registration – JW Marriott Hotel
19:00 – 21:00	Welcome Reception – Rooftop JW Marriott Hotel

Wednesday May 24, 2023 (Rio Time)

08:30 – 18:00	Registration – JW Marriott Convention Center
08:30 – 10:30	Opening Ceremony Chair: Adriana Vivacqua Keynote Talks Wenfei Fan Cooperative Work across Machines, Data Models and Users Myriam Lewkowicz Promoting the Diversity of Digital Technologies
10:30 – 11:00	Coffee/Tea Break
11:00 – 12:30	Section R1 (4 papers) – (Room Copacabana)
12:30 – 14:00	Lunch
14:00 – 16:00	Section R2 (6 papers) – (Room Copacabana)
16:00 – 16:30	Coffee/Tea Break
16:30 – 18:30	Section R3 (6 papers) – (Room Copacabana)
18:30 – 19:00	Transfer to the restaurant
19:00 – 21:00	Rio Onsite Conference Banquet

Thursday May 25, 2023 (Rio Time)

08:30 – 15:00	Registration – JW Marriott Hotel
09:00 – 10:00	Section R4 (3 papers) – (Room Copacabana)
10:00 – 10:30	Coffee/Tea Break
10:30 – 12:30	Section R5 (6 papers) – (Room Copacabana)
12:30 – 14:00	Lunch
14:00 – 16:00	Section R6 (6 Papers) – (Room Copacabana)
16:00 – 19:00	Rio Onsite Social Program

Friday May 26, 2023 (Rio Time)

08:30 – 10:30	Keynote Talks Cristina Bicharra Garcia The Good, the Bad, and the Ethical: Exploring Artificial Intelligence in Automatic Decision-Making Chunsheng Yang Be Ready for AI Third Wave!?
	Closing / Awards Ceremony Chair: Weiming Shen

Notes (Rio de Janeiro, Brazil):

- 1) The conference program has been scheduled to accommodate online participation around the world. Some authors will need to give online presentations in the evenings.
- 2) Online conference Zoom IDs and passwords will be sent to the registered attendees by emails around May 20, 2023.
- 3) Room Copacabana is a physical room with both onsite and online presentations.

Wednesday May 24, 2023 (Rio Time)

R1: Smart Cities and e-Health (11:00-12:30 | May 24, 2023)

4444	Larissa Silva, Marcos Calazans, Leonardo Vasconcelos , Raissa Barcellos, José Viterbo and Daniela Trevisan Smart Cities in Focus: A Bicycle Transport Applications Analysis
2253	Juliana Câmara, Leonardo Vasconcelos, Mônica Silva , Anderson Zudio, Daniela Trevisan and José Viterbo Using the Engagement by Design to reflect on recruiting and selecting IT professionals
3280	Yuri Oliveira de Lima, Carlos Eduardo Barbosa, Alan Lyra, Herbert Salazar, Matheus Argôlo and Jano Souza Providing Patients with Actionable Medical Knowledge: mHealth Apps for Laypeople
5663	Ting Zhang , Soung-Yue Liew and Xiaotong Li Computer Supported Cooperative Work (CSCW) for Business Intelligence Platform in Guangxi Sugar Industry

R2: IoT, Design Thinking and Collaborative Software Engineering (14:00-16:00 | May 24, 2023)

1173	Emilly Marques da Silva, Claudio Miceli , Antonio Correia and Daniel Schneider Understanding the Support of IoT and Persuasive Technology for Smart Bin Design: A Scoping Review
7130	Yazeed Alzahrani, Jun Shen and Jun Yan Energy-Efficient Data Consistency based Sampling Rate Optimization and Aggregation Method for IoT
7167	Fernanda Henriques, Melina Souza, Leonardo Vasconcelos, Magaywer Paiva, Elaine Seixas , Daniela Trevisan and José Viterbo The use of Design Thinking for reflection and innovation in recruitment and selection of IT professionals
7547	Vitor de Campos , José Maria David, Victor Ströele , Regina Braga and Alessandrea Oliveira DevFinder: An approach to finding expert software developers considering desired technologies and industry domains
6296	Hugo Guércio, Victor Ströele , José Maria David and Regina Braga A Process to Analyze Software Ecosystem Social Dimension Through a Collaboration Perspective
2448	Ramon Chaves , Claudia Motta, Antonio Correia, Jano de Souza and Daniel Schneider Tensions in design and participation processes: an ethnographic approach to the design, construction and evaluation of a collective intelligence model

R3: Collaborative Systems and Participatory Design (16:30-18:30 | May 24, 2023)

8910	Mateus Gonçalo Do Nascimento , José Maria David, Regina Braga, Victor Ströele , Fernando A. B. Colugnati and Mario Dantas An Architecture to Support the Development of Collaborative Systems in IoT Context
9914	Leandro Ouriques , Carlos Eduardo Barbosa and Geraldo Xexéo Understanding Military Collaboration in Wargames
6976	José Orete do Nascimento , Ana Cristina Garcia and Sean Siqueira Collaborative Elaboration of Design Fiction Narratives with Participatory Design Fiction Extend
9731	Susan Zhang, Jun Shen and Jun Yan Adult learners' online engagement and perceived outcomes with Educational Key Opinion Leaders: a two-phase study
4913	Marina de Lara , Edson Justino and Edson Scalabrin Dynamic Generation of Immersive CAVE Environments: Using Digital Game Mechanisms
3602	Maira Marques, Roc Meseguer, Sergio F. Ochoa and Luis Coordination and Awareness Mechanisms to Support Collaboration in Project-based Software Engineering Courses

Thursday May 25, 2023 (Rio de Janeiro Time)

R4: AI Techniques (09:00-10:00 | May 25, 2023)

7184	Shusmoy Chowdhury and Ajay Katangur Optimal Datacenter Selection for Cloud Services Using Swarm Intelligence
8191	Fabio Daudt, Ana Cristina Bicharra Garcia , Paulo Sergio Medeiros dos Santos and Luiz Alberto Pereira Afonso Ribeiro Do Explainable AI techniques effectively explain their rationale? A case study from the domain experts' perspective
8756	Shifeng Xu, Yijing Zhou, Xiaoyang Yu, Cuiting Huang and Chao Wu TFSS: Topological and Feature Space Fusion with Spatio-Temporal Modeling for Crop Yield Predictions

R5: Crowdsourcing and Collective Intelligence (10:30-12:30 | May 25, 2023)

462	Antonio Correia, Dennis Paulino, Hugo Paredes , Diogo Guimaraes, Daniel Schneider and Benjamim Fonseca Investigating Author Research Relatedness through Crowdsourcing: A Replication Study on MTurk)
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907	Herbert Salazar dos Santos , Carlos Eduardo Barbosa, Yuri Oliveira de Lima, Alan Lyra, Matheus Argôlo and Jano Moreira de Souza Crowdsourced Deals: the crowd using herself to find and filter deals
5284	Ygor Rolim , Danielly Alves, Flavia Clemente and Daniel de Oliveira NewsCollab: Fostering Data-driven Journalism with Crowdsourcing
6762	Dennis Paulino, Antonio Correia, Diogo Guimarães, Ramon Chaves, Glaucia Melo, Daniel Schneider, João Barroso and Hugo Paredes Stigmergy in Crowdsourcing and Task Fingerprinting: Study on Behavioral Traces of Weather Experts in Interaction Logs
1079	Marcos Almeida , Jano de Souza, Antonio Correia and Daniel Schneider Mapping Tokenomics Arrangements to Expand the Digital Nomad Ecosystem
9966	Ana Paula Pimentel, Claudia Motta, Antonio Correia and Daniel Schneider Agenda of Solutions to Mitigate the Challenge of Polarization of Extreme Positions in Social Media Environments

R6: Collaboration Technologies and Applications (14:00-16:00 | May 25, 2023)

8523	Luiz Fernando Puttow Southier , Sheila Cristiana de Freitas, Adriano Pizzini, Eduardo Alves Portela Santos and Edson Emilio Scalabrin Systematic Mapping Review on Log Preparation for Process Mining
291	Luiz Fernando Puttow Southier , Esther María Rojas Krugger, Cleiton dos Santos Garcia and Edson E. Scalabrin Process Mining and Root Cause Analysis for detecting inefficiencies in business processes: an applied case in a Brazilian telecommunications provider
2331	Yuhua Yin , Julian Jang-Jaccard, Fariza Sabrina and Jin Kwak Improving Multilayer-Perceptron(MLP)-based Network Anomaly Detection with Birch Clustering on CICIDS-2017 Dataset
7988	Dapeng Wang , Haobo Qiu and Liang Gao A subdomain uncertainty-guided Kriging method with subset simulation for reliability estimation
4413	Ngoc Luyen Le , Marie-Hélène Abel and Philippe Gousspillou A Constraint-based Recommender System via RDF Knowledge Graphs
3479	Tianshuo Yang and Haibin Zhu New Employee Training Scheduling Using the E-CARGO Model

Program in Kunming, China

Wednesday May 24, 2023 (Beijing Time)

08:30 – 18:00	Onsite Registration			
09:00 – 10:40	Session A1: (Room A)	Session B1: (Room B)	Session C1: (Room C)	Session D1: (Room D)
10:40 – 11:00	Coffee/Tea Break			
11:00 – 12:40	Session A2: (Room A)	Session B2: (Room B)	Session C2: (Room C)	Session D2: (Room D)
12:40 – 14:00	Lunch			
14:00 – 15:40	Session A3: (Room A)	Session B3: (Room B)	Session C3: (Room C)	Session D3: (Room D)
15:40 – 16:00	Coffee/Tea Break			
16:00 – 17:40	Session A4: (Room A)	Session B4: (Room B)	Session C4: (Room C)	Session D4: (Room D)
18:00 – 19:00	Onsite Dinner			
19:30 – 21:30	Opening Ceremony + Two Keynote Talks (Room A) (onsite in Rio de Janeiro, 8:30am – 10:30am)			
21:00 – 4:00	R1, R2, R3 (Rio day time) 3 sessions			

Thursday May 25, 2023

9:00 – 10:40	Session A5: (Room A)	Session B5: (Room B)	Session C5: (Room C)	Session D5: (Room D)
10:40 – 11:00	Coffee/Tea Break			
11:00 – 12:40	Session A6: (Room A)	Session B6: (Room B)	Session C6: (Room C)	Session D6: (Room D)
12:40 – 14:00	Lunch			
14:00 – 15:40	Session A7: (Room A)	Session B7: (Room B)	Session C7: (Room C)	Session D7: (Room D)
15:40 – 16:00	Coffee/Tea Break			
16:00 – 17:40	Session A8: (Room A)	Session B8: (Room B)	Session C8: (Room C)	Session D8: (Room D)
18:00 – 20:00	Kunming Onsite Conference Banquet			
19:00 – 4:00	R4, R5, R6, (Rio day time) 3 sessions			

Friday May 26, 2023

9:00 – 10:40	Session A9: (Room A)	Session B9: (Room B)	Session C9: (Room C)	Session D9: (Room D)
10:40 – 11:00	Coffee/Tea Break			
11:00 – 12:40	Session A10: (Room A)	Session B10: (Room B)	Session C10: (Room C)	Session D10: (Room D)
12:40 – 14:00	Lunch			
14:00 – 15:40	Session A11: (Room A)	Session B11: (Room B)	Session C11: (Room C)	Session D11: (Room D)
15:40 – 16:00	Coffee/Tea Break			
16:00 – 17:40	Session A12: (Room A)	Session B12: (Room B)	Session C12: (Room C)	Session D12: (Room D)
18:00 – 19:00	Onsite Dinner			
19:30 – 21:30	Two Keynote Talks + Closing /Award Ceremony (Room A) (onsite in Rio de Janeiro, 8:30am – 10:30am)			

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- 3) Rooms A and C are physical rooms with both onsite and online presentations; Rooms B and D are fully virtual rooms with only online presentations.

A1: Agents and Multi-Agent Systems (1), Chair: Gongzhuang Peng

1036*	Pengfei Liu and Liang Xiao. An Intelligent Human-Agent Interaction Support System in Medicine
1978*	Fuwei Li, Dianjie Lu, Baoxu An and Guijuan Zhang. Risk Region-based Prediction Model for the Epidemic Spreading
2545*	Wencong Geng, Guijuan Zhang and Dianjie Lu. An Epidemic Model Based on Intra-and Inter-group Interactions
2557*	Haizhu Bao, Quanke Pan, Miao Rong, Aolei Yang and Xiaohua Wang. A Multi-action Reinforcement Learning Algorithm for Energy-efficiency Blocking Flow-shop Scheduling Problem
2583*	Fuqing Zhao, Qiaoyun Wang and Zesong Xu. Reinforcement Learning Driven Moth-flame Optimization Algorithm for Solving Numerical Optimization Problems
2944*	Xingze Guo, Feng Gao and Xiaojun Zheng. Multi-agent collaborative behavior decision-making based on deep reinforcement learning
4452	Gang Wang, Xiao Lv, Kerong Ben and Liangzhong Cui. A particle swarm optimization algorithm based on experience pool for multi-UAV cooperative reconnaissance task allocation

A2: Collaboration Methods, Mechanisms, Processes, and Protocols (1), Chair: Ruiting Zhou

375*	Yuanmeng Tian, Shuying Wang, Shen Xu, Qing Zheng. Crowdsourcing Workers Recommendation Algorithm Based on Improved Deep Matrix Factorization
1586*	Xiang Li, Renjie Huang and Guoqiang Xiao. A Self-Attention Based Task-Adaptive Integration of Pre-trained Global and Local Classifiers for Few-Shot Classification
1817*	Xiaoling Zeng, Zhaoyang Yang and Chuanbiao Wen. Region Symmetry Mask for TCM-based Face Shape Classification
2370*	Junnan Yin, Yuyan Sun, Lei Cui, Zhengyang Ai and Hongsong Zhu. SynCPFL: Synthetic Distribution Aware Clustered Framework for Personalized Federated Learning
2404*	Boao Xiao, Siyuan Wu, Xin He and Wanchun Dou. Generalized Image Embedding for Multi-Domain Image Retrieval

A3: Collaboration Methods, Mechanisms, Processes, and Protocols (2), Chair: Jinghui Zhang

2795*	Han Sun, Yan Zhang, Zhen Xu, Runmei Zhang and Mingxuan Li. MK-FLFHNN: A Privacy-Preserving Vertical Federated Learning Framework For Heterogeneous Neural Network Via Multi-Key Homomorphic Encryption
2996	Chengwu Tu, Shengjie Zhao and Hao Deng. FedWNS: Data Distribution-Wise Node Selection in Federated Learning via Reinforcement Learning
3119	Chaoyi Yan, Xinli Huang, Hongyan Gu and Siyuan Meng. SimulE: A novel convolution-based model for knowledge graph embedding
3157	Haikun Yu, Dacheng Jiang, Guipeng Zhang, Zhenguo Yang and Wenyin Liu. A Reputation System based on Blockchain and Deep Learning in Social Networks
3274	Baowei Wang, Yi Yuan, Bin Li, Changyu Dai, Yufeng Wu and Weiqian Zheng. QAIC: Quality-assured image crowdsourcing via blockchain and deep learning
3327	Yuan Liu, Chenyu Li, Zhiqiang Zheng, Qingli Guo and Xiaorui Gong. Reverse engineering workload measure based on function classification

**A4: Collaboration Technology Applications in Intelligent Buildings and Smart Homes,
Chair: Yanjun Shi**

632*	Fuqing Zhao and Tao Jiang. A Cooperative Two-stage Migrating Birds Optimization Algorithm Based on Quasi-Entropy
2929*	Yi Liu, Weiqing Huang and Siye Wang. TransRF: Towards a Generalized and Cross-Domain RFID Sensing System Using Few-Shot Learning
4412	Yanpeng Qi, Chen Pang, Yiliang Liu, Hong Liu and Lei Lyu. Graph Convolutional Network with Long Time Memory for Skeleton-based Action Recognition
4800	Haopeng Wang and Wei Wu. Attention based Dual Stream Modality-aware model for Visible-Infrared Person Re-identification
6290	Qingya Yang, Chang Liu, Peipei Fu, Bingxu Wang, Gaopeng Gou and Gang Xiong. A Recurrent Self-learning Labeler for Building Network Traffic Ground Truth
6355	Bingchan Li and Bo Mao. Similarity Calculation of 3D Building Model based on EMD of Graph Features
8064	Chenxing Gao, Lingjun Chen, Caidan Zhao, Xiangyu Huang and Zhiqiang Wu. Lightweight Image Dehazing Algorithm Based on Detail Feature Enhancement

**A5: Collaboration Technology Applications in Aerospace, Automotive, and Manufacturing (1),
Chair: Chen Yang**

158*	Xianfeng Ye, Zhiyun Deng, Yanjun Shi and Weiming Shen. An Agent-based System Architecture for Automated Guided Vehicles in Cloud-Edge Computing Environments
832*	Zhenyu Wang, Yanghui Li and Pengfei Fu. An Automatic Configuration Memetic Algorithm with Reinforcement Learning Mechanism for Real-value Optimization Problems
1992*	Xiaohan Zhang, Han Wang, Chenze Wang, Qing Liu and Min Liu. A Safe-Domain Generative Adversarial Network with Transformer for Noisy Imbalanced Fault Diagnosis
2089*	Chen Yang, Zou Lai, Yingchao Wang, Shulin Lan, Lihui Wang and Liehuang Zhu. A Novel Bearing Fault Diagnosis Method based on Stacked Autoencoder and End-edge Collaboration
2356*	Qun Ding, Xiaolong Xu and Wenming Gui. Path Planning based on Reinforcement Learning with Improved APF model for Synergistic Multi-UAVs
3590	Fuqing Zhao, Zesong Xu and Qiaoyun Wang. A Population-based Iterated Greedy Algorithm for Distributed No-wait Flow-shop Scheduling Problem
5263	Chao He, Yingshan Shen, Nan Zhong, Huijuan Hu, Dingju Zhu, Lihua Cai and Dongqing Song. Multimodal Sentiment Analysis Based on Multiple Stacked Attention Mechanisms

A6: Collaboration Technology Applications in Healthcare and Homecare (1), Chair: Ding Ding

521*	Aimei Dong, Zhiyun Qi, Yi Zhai and Guohua Lv. Multi-Source Domain Transfer Learning on Epilepsy Diagnosis
713*	Fujia Zhou, Wei Zhang, Guangxu Zhu, Hang Li and Qingjiang Shi. CHA-Sens: An End-to-End Comprehensive Residual Convolution Framework for CSI-based Human Activity Sensing
1350*	Haibo Wang, Ding Ding, Yuhao Liu and Chi Wang. IVRSandplay: An Immersive Virtual Reality Sandplay System Coupled with Hand Motion Capture and Eye Tracking
2596*	Fanshu Gong, Lanju Kong and Yuxuan Lu. An Overview of Blockchain Scalability for Storage

3398	Yuntao Ma, Lihe Wang, Junzhou Luo and Xiaolin Fang. A Trusted and Intelligent Service System for the Decoction of Traditional Chinese Medicine
4282	Ji Zheng, Ding Ding, Yuang Zhang, Zidu Cheng and Zhuying Li. VRNavigSS: A Two-dimensionality Virtual Reality System for Depression Level Detection
4622	Wenxu Han, Qi Li, Meiju Yu and Ru Li. Research on Medical Data Storage and Secure Sharing Scheme on Blockchain

**A7: Collaboration Technology Applications in Social Networks and Entertainment (1),
Chair: Rui Zhu**

237*	Li Hanqing and Chen Niannian. Understanding Social Relations with Graph-Based and Global Attention
565*	Yuyang Liu, Junruo Gao, Zefang Zhao and Jun Li. Complement Coupling Network for Multiple Activated Users Prediction in Social Cascade
1125*	Caiyan Li, Lizhen Cui, Yonghui Xu and Ning Liu. Logic Event Graph Enhanced Narrative Generation
1132*	Xigang Sun, Jingya Zhou, Zhen Wu and Jie Wang. Information Diffusion Prediction via Exploiting Cascade Relationship Diversity
1238*	Yixuan Ge, Qing Yu and Zuohua Wang. SKRAG: Sampling on Knowledge Graph for Recommendation with Relational Path-aware Graph Neural Network
1599*	Wu Chaokai, Wang Yansong and Jia Tao. Dynamic Link Prediction Using Graph Representation Learning With Enhanced Structure And Temporal Information
6903	Weisheng Li, Wentao Chen, Zhihong Pan, Yuanfei Deng, Yong Tang and Chaobo He. Network Embedding with Enhanced Feature Representations for Link Prediction

**A8: Collaboration Technology Applications in Social Networks and Entertainment (2),
Chair: Rui Zhu**

1946*	Yan Wang and Chongwen Wang. Analysis of Students' Seats Distribution Based on Single-channel Video
2026*	Yin Wu, Mingpei Cao, Yueze Zhang and Yong Jiang. Detecting Clickbait in Chinese Social Media by Prompt Learning
2071*	Wanying Liang, Yong Tang and Jia Zhu. Social Network Community Detection based on Inner-Community Information Diffusion Simulation Algorithm
2663*	Yubo Shen, Wenduo Jiang, Yu Zheng, Ru Jia and Ru Li. Research on False Comment Recognition Algorithm Integrating crazy fan base Subculture Phenomenon
3045	Shengzhe Zhang, Jiayu Ye and Qingxiang Wang. Spa-L Transformer: Sparse-self attention model of Long short-term memory positional encoding based on long text classification
4259	Huiyang Chang, Binbin Li, Guangjun Wu, Haiping Wang, Yu Ding, Siyu Jia, Zisen Qi and Xiaohua Jiang. UCWSC: A unified cross-modal weakly supervised classification ensemble framework
4768	Jinbin Tu, Qing Li and Yun Wang. T-Sorokin: A General Mobility Model in Opportunistic Networks

A9: Special Session: Smart Sensor Networks and Internet of Things, Chair: Xiaolong Xu

3265	Shuang Qiao, Chenhong Cao, Haoquan Zhou and Wei Gong. The trip to WiFi indoor localization across a decade — A systematic review
3849*	Xinwei Yang, Ning Chen, Songwei Zhang, Xiaobo Zhou, Tianyi Xu and Tie Qiu. An Evolutionary Reinforcement Learning Scheme for IoT Robustness
5075	Lifu Wang, Kai Dong, Xiaodan Gu, Zhen Ling and Ming Yang. Lightweight Gesture Based Trigger-Action Programming for Home Internet-of-Things
5207	Chuang Zhang, Geng Sun, Jiahui Li and Xiaoya Zheng. Bi-objective Optimization for UAV Swarm-enabled Relay Communications via Collaborative Beamforming
7793	Rongchuang Lv, Niansheng Chen, Songlin Cheng, Guangyu Fan, Lei Rao, Xiaoyong Song and Dingyu Yang. ASKCC-DCNN-CTC: A Multi-Core Two Dimensional Causal Convolution Fusion Network with Attention Mechanism for End-to-End Speech Recognition
8837	Yanfei Lu, Suzhen Cao, Qizhi He, Zixuan Fang, Junjian Yan and Yi Guo. Group Signature Authentication Scheme with Credit Evaluation Mechanism in VANET

**A10: Collaborative Computing (Clouds, Grids, Web Services, Blockchains) (1),
Chair: Cheng Xie**

157*	Qianqian Chang, Lin Xu and Lei Zhang. Practical privacy-preserving mixing protocol for Bitcoin
1228*	Zilong Zeng, Buqing Cao, Hongfan Ye, Dong Zhou, Mingdong Tang and Feng Xiao. An Edge Server Co-deployment Method via Joint Optimization of Communication Delay and Load Balancing in Edge Collaborative Environment
1551*	Changyong Yu, Rong Hu and Bangjun Wang. AKGIN: An API knowledge graph and intent network based mashup-oriented API recommendation method
1701*	Caishan Weng, Zhiyang Shu, Zhengjia Xu, Jinghui Zhang, Junzhou Luo, Fang Dong, Peng Wang and Zhengang Wang. FreezePipe: An Efficient Dynamic Pipeline Parallel Approach Based on Freezing Mechanism for Distributed DNN Training
1714*	Yang Jin, Hui Xu, Zhengbin Qin and Lang Huang. Improved Wild Horse Optimizer with Cooperative Multi-Strategies for Network Intrusion Detection
2572*	Sheng Chen, Jinxi Li, Baochao Chen, Deke Guo and Keqiu Li. vHSFC: Generic and Agile Verification of Service Function Chain with parallel VNFs

**A11: Collaboration Technology Applications in Logistics and Transportation,
Chair: Yanjun Shi**

1475*	Xiaobo Wei, Peng Li, Weiyi Huang, Zhiyuan Liu and Qin Liu. Two-stage Vehicle Pair Dispatch in Multi-hop Ridesharing
2966	Xiaolong Xu, Qun Ding and Licheng Lin. Indoor Navigation Mechanism based on 5G network for Large Parking Garage
6206	Xijun Zhang, Jin Su, Hong Zhang, Xianli Zhang, Xuan Chen and Yong Cui. Traffic accident location study based on AD-DBSCAN Algorithm with Adaptive Parameters
7048	Xi Song, Mingyang Li, Weidong Xie and Yuanyuan Mao. A Reinforcement Learning-driven Iterated Greedy Algorithm for traveling salesman problem
9254	Feng Gao, Xingze Guo and Xiaojun Zheng. Research on AGV Path Planning of Simultaneous Pickup and Delivery with Time Window
9533	Hongna Lou, Chaoying Li, Donglin Liang, Meng Yang, Yanjun Shi. A Rule-based Ramp Merging Algorithm for Multi-lane Highway in CAV Environments

A12: Collaboration Technology Applications in Power and Energy, Chair: Cheng Xie

835*	Runhuan Chen, Hua Dai, Hui Li, Geng Yang, Haozhe Wu and Weihong Yang. An Urban Electric Load Forecasting Model Using Discrepancy Compensation and Short-term Sampling Contrastive Loss in LSTM
1909*	Qingguo Zhou, Xiaorun Tang, Qingquan Lv, Ziyuan Li, Jun Shen, Jinqiang Wang and Binbin Yong. Ensemble Machine Learning Method for Photovoltaic Power Forecasting
2049*	Guangbin Bao, Bo Zhang, Ling Tang, Jinyuan Yang and Xiaolian Wu. Research on the short-term electric load forecasting model based on the graph learning layer and time-series convolutional network
3913	Shaorong Cao, Yuanyuan Mao, Mingyang Li, Weidong Xie and Chaochao Gao. Bi-population Cooperative Moth-flame Optimization Algorithm for the Networking Mode Optimization
6795	Xiao Jing, Zhiang Wu and Dejun Mu. Electrical Fault Diagnosis via Text Mining: A Weakly-Supervised Learning Model
7314	Hongwei Wu, Rong Yang, Huang Qing, Kedong Liu, Zhuojun Jiang, Yangxi Li and Hong Zhang. TSFN: an Effective Time Series Anomaly Detection Approach via Transformer-based Self-feedback Network

B1: Collaboration Technology Applications in Business and Administration, Chair: Wenchao Yi

133*	Bin Ning, Fang Liu and Zhixiong Liu. Creativity Support in AI Co-creative Tools: Current Research, Challenges and Opportunities
1603*	Xiaojing Ji, Peilin Yang, Qingbo Hao, Wenguang Zheng and Yingyuan Xiao. Item Multi-Information Evolution Network for Click-Through Rate Prediction
2037*	Junhua Zhang, Junzhou Luo, Haozhe Zhang, Qingfeng Yuan and Xiaolin Fang. Embedded Platform Based Intelligent Lecture Recording System
5197	Ma Donglin, Chen Qingqing, Cao Feng-Lin and He Bochang. An Aspect Level Sentiment Analysis Method for Graph Convolutional Networks based on Improved Dependencies
5685	Wanqing Wu, Xin Yang and Ruohe Lei. A Trust-Delivery Collaborative Recommendation Method Based on Local Differential Privacy
9270	Tian Hu, Shangyuan Zhuang, Jiyan Sun, Yinlong Liu, Wei Ma, Yu Chen and Weiyu Liu. Implementation of a Cost-Effective Privacy Leakage Detection System for Hosted Programs

B2: Agents and Multi-Agent Systems (2), Chair: Yulian Cao

3419	Baoxu An, Guijuan Zhang, Fuwei Li, Nianyun Song, Hong Liu and Dianjie Lu. Deep reinforcement learning-based panic crowd evacuation simulation
3465	Chuanmiao Zhao, Guijuan Zhang, Lei Lv, Hong Liu and Dianjie Lu. Spatial-temporal Consistency based Crowd Emotion Recognition
3929	Xie Yin, Luo Yigui, She Haihong and Xiang Zhaohong. Computation of Mobile Phone Collaborative Embedded Devices for Object Detection Task
4118	Yuan Tang, Xu Zhang, Rui Wang, Jinfeng Xu, Long Hu and Yixue Hao. Crowd Intelligent Grouping Collaboration Evacuation via Multi-agent Reinforcement Learning
6273	Zhang Zhu and Ping Sun. Multi-Agent Collaborative Trajectory Prediction with Hierarchical Vectorized Representation

B3: Agents and Multi-Agent Systems (3), Chair: Wen Jiang

7174	Shourong Jiao, Dianjie Lu, Chuanhua Jia, Hong Liu and Guijuan Zhang. Abnormal Crowd Behavior Detection Based on the Fusion of Macro Features and Micro Features
8684	Wen Jiang, Yanping Wang, Yang Li, Yun Lin and Wenjie Shen. An Intelligent Anti-jamming Decision-making Method Based on Deep Reinforcement Learning for Cognitive Radar
8976	Yueyao Chen, Beilun Wang, Tianyi Ma and Cheng Chen. Applying Robust Gradient Difference Compression to Federated Learning
9129	Xiang Cao, Ningjiang Chen, Xuemei Yuan and Yifei Liu. A Cooperative Edge Caching Approach Based on Multi-Agent Deep Reinforcement Learning
9376	Xiaorui Guo and Liang Xiao. The Design of A Multi-Agent Protocol for Swarm Decision Making
9543	Yinghao Wu, Yaoguang Wei, Dong An and Jincun Liu. A Hybrid Control Strategy based on Neural Network and PID for Underwater Robot Hovering

B4: Collaboration Methods, Mechanisms, Processes, and Protocols (3), Chair: Jinghui Zhang

3452	Baijun Chen, Daheng Yin, Lifei Teng and Fang Dong. HyperRTV: Neural-Enhanced Adaptive Real-Time Video Streaming Based on Terminal-Edge Collaboration
3655	Yueyao Chen, Beilun Wang, Yan Zhang and Jingyu Kuang. A Robust Framework for Fixing The Vulnerability of Compressed Distributed Learning
3785	Pengfei He, Linlin Liu, Dianlong You, Limin Shen and Zhen Chen. BAT: Mining binary-API Topic for Multi-service Application Development
4611	Xiaoyuan Zhang, Bing Tang, Qing Yang, Wei Xu and Feiyan Guo. Cost-Optimized Microservice Deployment for IoT Application in Cloud-Edge Collaborative Environment
5936	Qingya Yang, Peipei Fu, Junzheng Shi, Bingxu Wang, Zhen Li and Gang Xiong. Multi-Feature Fusion Based Approach for Classifying Encrypted Mobile Application Traffic
6146	Siqi Liu and Fang Dong. MIA-FedDL: A Membership Inference Attack against Federated Distillation Learning

**B5: Collaboration Methods, Mechanisms, Processes, and Protocols (4),
Chair: Chunjiang Zhang**

6239	Tianrui Wang, Weina Niu, Kangyi Ding, Lingfeng Yao, Pengsen Cheng and Xiaosong Zhang. Black-box Word-level Textual Adversarial Attack Based On Discrete Harris Hawks Optimization
6639	Qingxin Liu, Qi Qi and Ni Li. Federated Opposite Learning Based Arithmetic Optimization Algorithm for Image Segmentation Using Multilevel Thresholding
7575	Chunmian Wang, Junzhou Luo, Zhen Ling, Ming Yang, Xiaodan Gu and Yu Yao. TorDNS: A Novel Correlated Onion Address Generation Approach and Application
8095	Chen Yang, Can Wang, Weidong Zhang, Huiyi Zhang and Xuangou Wu. Decentralized Application Identification via Burst Feature Aggregation
8177	Xinyu Liu and Xiaolong Xu. MDPFL:A Multiple Differential Privacy Protection Method based on Federated Learning
9641	Xiaofei Xing, Zimeng Wang, Xiaoli Chen, Yunxuan Zeng and Siqi He. Flower Image Identification and Feature Extracting Method Based On Migration Learning

1191	Xue Lin, Yushui Geng, Jing Zhao, Daquan Cheng, Xuefeng Zhang and Hu Liang. Multi-modal medical image classification method combining graph convolution neural networks
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**B6: Collaboration Technology Applications in Aerospace, Automotive, and Manufacturing (2),
Chair: Chunjiang Zhang**

9939	Yuqi Li, Zirui Gong, Yihang Zhou, Yuting He and Renjie Huang. Production Evaluation of Citrus Fruits based on the Yolov5 compressed by Knowledge Distillation
7311	Yinning Shao, Yukai Zhao, Hang Yu, Min Liu and Yunlong Ma. Graph Pooling Based Human Detection Method for Industrial Application
7569	Shichen Tian, Zhiyun Deng, Jiaxin Fan, Chunjiang Zhang, Weiming Shen and Liang Gao. A Variable Neighborhood Search Algorithm for Heat Pipe-Constrained Component Layout Optimization
8672	Yan Jun Dong, Haoyuan Hu, Min Zhu, Pan Hu, Lihong Jiang and Hongming Cai. Intelligent Manufacturing Collaboration Platform for 3D Curved Plates Based on Graph Matching
8746	Chao Zhao and Weiming Shen. An Application-oriented Perspective of Domain Generalization for Cross-Domain Fault Diagnosis
9973	Jiaxin Fan, Chunjiang Zhang and Weiming Shen. A Matheuristic-based Rescheduling Method for Flexible Job Shops with Lot-streaming and Machine Reconfigurations

**B7: Collaboration Technology Applications in Healthcare and Homecare (2),
Chair: Yanan Song**

7747	Xu Ru, Chenghao Zhang and Heng Zhang. A Method of Hybrid Fabric and Inertial Sensor for Human Posture Perception
7826	Jifan Shen and Yuling Sun. Privacy-Preserved Video Monitoring Method with 3D Human Pose Estimation
8245	Wanchuan Jiang and Ling Ou. Weakly Supervised Object Detection with Pyramid Squeeze Attention and Candidate Box Screening Algorithm
8560	Zhang Liu, Liang Xiao, Jianxia Chen, Lili Song, Peng Qi and Zefang Tong. A Multimodal Knowledge Graph for Medical Decision Making Centred Around Personal Values
8758	Hao Zhou, Bingchan Li and Bo Mao. An Improved LSTM based Method for User Behavior Classification in VR Scenes
9065	He Xiao and Yuling Sun. "Policies Look for the Elderly": A Knowledge Graph Based Care Information Recommendation System

B8: Special Session: Collaborative Knowledge Creation and Sharing in Complex Processes (2), Chair: Wei Li

6724	Tiyong Liu and Shiwei Cheng. A Recommender Algorithm Based on Knowledge Graph Convolutional Network and Knowledge Reasoning Optimization
6987	Enchao Zhang, Weidong Liu, Shi Liu and Yan Cao. Research on patent recommendation method based on graph neural network
7545	Jinchen Huo, Weidong Liu, Yang Li and Yan Cao. Exploring Patent Transformation Event: Forecasting Patent Transfer Time
7824	Wei Li, Shiyu Zhu and Li Li. Leveraging Knowledge-Aware Method for Charge Prediction

7918	Yuejia Wu and Jian-Tao Zhou. A Graph Sequence Generator and Multi-head Self-attention Mechanism based Knowledge Graph Reasoning Architecture
9731	Xiaochen Zhang, Jun Shen and Jun Yan. Adult Learners' Online Engagement and Perceived Outcomes with Educational Key Opinion Leaders: a Two-Phase Study

**B9: Collaboration Technology Applications in Social Networks and Entertainment (3),
Chair: Gaofeng He**

5155	Xingang Wang, Xiaoyu Liu, Xiaomin Li and Jinan Cui. Multi-granularity Text Representation and Transformer-Based Fusion Method for Visual Question Answering
6254	Rui Huang, Huan Lu, Yan Xing and Wei Fan. Multi-scale Convolutional Feature Approximation for Defocus Blur Detection
6354	Diandian Guo, Majing Su, Cong Cao, Fangfang Yuan, Xiaoliang Zhang, Yanbing Liu and Jianhui Fu. Curvature-Driven Knowledge Graph Embedding for Link Prediction
6839	He Shuangjiang, Zhao Huijuan and Yu Li. Key technology of Metaverse Exhibition Interaction System: Avatar Expression Reenactment Method of Overall-Local Optical-Flow Estimation and Illumination Difference Supervised

**B10: Collaboration Technology Applications in Social Networks and Entertainment (4),
Chair: Xiaolin Fang**

7235	Xingyu Liu, Junwei Cheng, Hao Cheng, Chaobo He and Qimai Chen. Self-supervised community detection in multiplex networks with graph convolutional autoencoder
8900	Yang Wang, Jiayan Xiang, Hangyu Cheng, Wanjun Chen, Yong Xiao and Guosheng Kang. Towards Dynamic Evolutionary Analysis of ProgrammableWeb for API-Mashup Ecosystem
8952	Junruo Gao, Yuyang Liu, Zhaojuan Yue, Haibo Wu and Jun Li. Robust preference learning for recommender systems under purchase behavior shifts
9302	Haoliang Zhang, Wenchao Bai, Jingyi Ding and Jiahui Jin. Time-Aware POI Recommendation Based on Multi-Grained Location Grouping
9529	Xing'E Yan, Chang Liu, Hanyu Luo and Jiuxin Cao. Group Popularity Prediction in EBSN based on an Improved Self-Excited Hawkes Process
9816	Xu Sun, Weiyu Zhang, Xinchao Guo and Wenpeng Lu. Unsupervised Graph Neural Network with Self-Expressive Attention for Community Detection
9904	Chaofei Li, Ziyuan Zhu, Ruicheng Niu, Tao Leng and Dan Meng. SeAuNet: Semi-Autonomous Encrypted Traffic Classification and Self-labeling

B11: Collaborative Computing (Clouds, Grids, Web Services, Blockchains) (2), Chair: Feng Yu

2952	Xinshuai Zhu, Songheng He, Xuren Wang, Chang Gao, Yushi Wang, Peian Yang and Yuxia Fu. Simplified-Xception: A New Way to Speed Up Malicious Code Classification
3220	Zhenxuan Xu, Yunzhou Xie, Fang Dong, Shucun Fu and Jiangshan Hao. Joint Optimization of Task Offloading and Resource Allocation for Edge Video Analytics
4989	Yaoyi Deng, Mingxuan Li, Hailong Zhang, Dongdong Huo, Yanqiu Zhang, Shuai Yun, Yu Wang and Zhen Xu. Building Efficient Parallel Endorsement Node on Blockchain Systems
5254	Xiangyu Niu, Lanju Kong, Fuqi Jin, Xiaolin Song, Xinping Min and Qingzhong Li. NFT Cross-Chain Transfer Method Under the Notary Group Scheme

5654	Boyu Li and Bin Wu. Online Robust Bin Packing for Resource Allocation in Cloud Computing
5758	Hanghai Zhang, Lubin Lin, Guipeng Zhang, Zhenguo Yang and Wenyin Liu. ATIPM: A Blockchain-Based Anonymous and Traceable Intellectual Property Management Scheme

B12: Collaborative Computing (Clouds, Grids, Web Services, Blockchains) (3), Chair: Feng Yu

6893	Shicheng Xu and Xiaolong Xu. ConvTrans-TPS: A Convolutional Transformer Model for Disk Failure Prediction in Large-Scale Network Storage Systems
7354	Jing Li, Jufeng Sun, Fengyong Li, Xingkai Yang and Yuwei Wang. BIFLC: A Blockchain and IPFS-Based Multi-Consensus Federated Learning Framework
9120	Jing Tian, Juan Chen, Lin Bai, Ningjiang Chen and Suqun Huang. Knowledge Distillation with Source-free Unsupervised Domain Adaptation for BERT Model Compression
9284	Qi Li, Wenxu Han, Lin Zhao, Meiju Yu, Ru Li and Ru Jia. Information Dissemination Model Based on Blockchain Social Network
9370	Zixuan Ma, Yuqi Zhang, Ruibang You and Chen Li. Who Gets in the Way of Parallelism? Analysis and Optimization of the Parallel Processing Bottleneck of SDN Flow Rules in ONOS
9648	Zhigang Xu, Duoyue Liao, Xinhua Dong, Hongmu Han, Zhongzhen Yan and Kangze Ye. LMQF: Hyperledger Fabric Concurrent Transaction Conflict Solution Based on Distributed Lock and Message Queue

C1: Security and Privacy in Collaborative Systems (1), Chair: Cheng Xie

163*	Chaofei Li, Ziyuan Zhu, Ruicheng Niu, Tao Leng and Dan Meng. Enhancing Adversarial Robustness for Deep Metric Learning through Adaptive Adversarial Strategy
191*	Bowen Guo, Qianmu Li and Xiao Liu. Improving Adversarial Transferability with Heuristic Random Transformation
275*	Leiqi Wang, Zijun Cheng, Qiuqian Lv, Yan Wang, Shixiang Zhang and Huang Weiqing. ACG: Attack Classification on Encrypted Network Traffic using Graph Convolution Attention Networks
1042*	Yuhao Zhao and Siguang Chen. Dynamic Privacy-Enhanced Federated Learning Algorithm Based on Gradients Perturbation
2521*	Jiaqi Chang, Zhujuan Ma, Binghao Cao and Erzhou Zhu. VDDA: An Effective Software Vulnerability Detection Model Based on Deep Learning and Attention Mechanism
2591*	Qihui Zhou, Qianyun Ruan, Dongdong Huo, Penghui Lv, Yu Wang and Zhen Xu. The malicious resource consumption detection in permissioned blockchain based on traffic analysis

C2: Security and Privacy in Collaborative Systems (2), Chair: Peng Li

2807*	Jun Li, Fengshi Zhang, Yonghe Guo, Siyuan Li, Gaungjun Wu, Dahui Li and Hongsong Zhu. A Privacy-Preserving Online Deep Learning Algorithm Based on Differential Privacy
3606	Yi Gao, Fangfang Yuan, Cong Cao, Majing Su, Dakui Wang and Yanbing Liu. Few-shot Malicious Domain Detection on Heterogeneous Graph with Meta-learning
3916	Zhen Liu, Meiju Yu and Ru Li. A Fake Message and Malicious Node Detection Method Using Machine Learning in V-NDN

4266	Bingxu Wang, Zhen Li, Gang Xiong, Gaopeng Gou, Qingya Yang and Jiaying Song. Identifying DoH Tunnel Traffic Using Core Feathers and Machine Learning Method
4322	Benyu Li, Jing Yang, Yuxiang Wang, Xiao Huang, Junshuai Ren and Liming Wang. A Blockchain-Based Privacy-Preserving Data Sharing Scheme with Security-Enhanced Access Control
4391	Ji Zhang, Peng Li, Weiyi Huang, Lei Nie, Haizhou Bao and Qin Liu. On Privacy-Preserving Task Assignment for Heterogeneous Users in Mobile Crowdsensing

C3: Collaborative Processing of Big Data (3), Chair: Cheng Xie

387*	Jialu Zhang, Xingguo Jiang, Yan Sun and Hong Luo. RS-TTS A Novel Joint Entity and Relation Extraction Model
550*	Yahui Lu and Yu Jiang. Dirty page prediction by machine learning methods based on temporal and spatial locality
678*	Bing Shi, Wenan Tan and Pengfei Yu. Momentum Contrastive Learning for Sequential Recommendation
757*	Yangyan Xu, Fangfang Yuan, Cong Cao, Xiaoliang Zhang, Majing Su, Dakui Wang and Yanbing Liu. MetaBERT: Collaborative Meta-Learning for Accelerating BERT Inference
848*	Xiaolong Xu, Yihao Dong and Jian Song. An answer summarization scheme based on multi-layer attention model
1324*	Hanlin Liu, Jiantao Zhou and Hua Li. Using Rough Sets to Improve the High-dimensional Data Anomaly Detection Method Based on Extended Isolation Forest

C4: Collaborative Processing of Big Data (4), Chair: Hongming Cai

1337*	Yingying Xue, Kun Huang, Hui Peng, Aibo Song, Kun Zhao and Jibin Sun. A Multi-granularity Knowledge-enhanced Sequential Recommendation
2223*	Xin Feng, Xingguo Jiang, Yan Sun and Hong Luo. An Anomaly Detection Method for Multivariate Time Series Based on Cross Window
2271*	Yunsong Xiang, Xuemei Yang, Yan Sun and Hong Luo. A Fault-tolerant and Cost-efficient Workflow Scheduling Approach Based on Deep Reinforcement Learning for IT Operation and Maintenance
2307*	Jingqi Yang, Cheng Xie and Peng Tang. Discriminative Feature Focus via Masked Autoencoder for Zero-Shot Learning
3008	Ruobing Wang, Daren Zha, Qingfei Zhao, Yuanye He and Xin Wang. RW-MMDCG: Multi-modal via Rolling-Window Directed Graph Network for Conversational Emotion Recognition
3034	Leping Li, Kun Ma and Benkuan Cui. Multi-Information Filter Encoding Network for Multi-Label Text Classification

C5: Collaborative Processing of Big Data (5), Chair: Chunsheng Yang

8005	Jia Peng, Neng Gao, Yifei Zhang and Min Li. A Multi-view Knowledge Graph Embedding Model Considering Structure and Semantics
8279	Ru Wang, Peipei Wang, Lin Li and Peiyu Liu. Community Detection with Graph Convolutional Auto-Encoder and Deep Clustering
8481	Shuyang Zuo, Xiaolin Chai, Hong Luo and Yan Sun. ZAlert A Real Time Prediction Framework For Network Alert
8815	Jianbang Ju, Yingyuan Xiao, Peilin Yang and Wenguang Zheng. MRIN: Fine-grained Feature Interaction based on Multiple Feature Relationships for CTR Prediction

9692	Yu Zhao, Wei Wu, Yue Guo. Cross-Modal Fusing Vision-Language Network for Referring Image Segmentation
9918	Jiayan Xiang, Wanjun Chen, Yang Wang, Bowen Liang, Zihao Liu and Guosheng Kang. Interactive Web API Recommendation for Mashup Development based on Light Neural Graph Collaborative Filtering

C6: Special Session: Collaborative Knowledge Creation and Sharing in Complex Processes (1), Chair: Hongwei Wang

349*	Hao An, Dongsheng Chen, Weiyuan Xu, Zhihong Zhu and Yuexian Zou. TLAG: An Informative Trigger and Label-Aware Knowledge Guided Model for Dialogue-based Relation Extraction
1565*	Zuyang Ma, Hongwei Wang and Kaihong Yan. BERT-based Question Answering using Knowledge Graph Embeddings in Nuclear Power Domain
2819*	Ya Zhang, Xi Lin, Jun Wu, Bei Pei and Yunyun Han. Blockchain-Assisted UAV Data Free-Boundary Spatial Querying and Authenticated Sharing
5071	Kaihong Yan, Haoran Tang, Jian Zhang, Peng Peng and Hongwei Wang. A Novel Encoder-Decoder Architecture for Table Border Segmentation of Scanned Documents
6652	Chenghan Li, Mingchen Li, Hanzhen Lu, Jiabao Pan, Bo Qin and Hongwei Wang. A Computational Framework for Effective Representation and Extraction of Knowledge Graph for Power Plant Maintenance and Overhaul
6657	Mei Yu, Zhaoyuan Ding, Jian Yu, Wenbin Zhang, Ming Yang and Mankun Zhao. Graph Contrastive Learning with Adaptive Augmentation for Knowledge Concept Recommendation

C7: Special Session: Adaptive Collaboration Systems (1), Chair: Kunkun Peng

1284*	Xiao-Min Hu, Jing-Hui Xu, Min Li, Ying Zeng and Yi Liu. Optimization of Resource Allocation based on Swarm Intelligence for Multi-Objective Dynamic SEIV Models
1617*	Chenyang Zhang and Lu Liang. Crowdsourcing Tasks Allocation based on Incentives via Group Multirole Assignment
1836*	Haoqian Li, Jiayi Song, Wenguang Zheng and Yingyuan Xiao. Scoring prediction model focusing on local feature interaction of text
1952*	Caiyun Wu, Fazhi He, Bo Fan and Yaqian Liang. Adaptive error-bounded simplification of Delaunay meshes with multi-objective optimization
1984*	Jiahui Liu, Lvqing Yang, Sien Chen, Wensheng Dong, Bo Yu and Qingkai Wang. An Improved MOEA Based on Adaptive Adjustment Strategy for Optimizing Deep Model of RFID Indoor Positioning
2519*	Hua Ma, Wen Zhao, Zixu Jiang, Peiji Huang, Wensheng Tang and Hongyu Zhang. A Multi-level Approach to Learning Early Warning based on Cognitive Diagnosis and Learning Behaviors Analysis

C8: Special Session: Advanced Computing for Industrial Internet of Things (1), Chair: Hongming Cai

1442*	Zheng Luo, Xiaojie Lin, Wei Zhong and Encheng Feng. Research on Coarse Granularity Data Sample Completion Method for District Heating System
2538*	Jiaying Chen, Xiaojie Lin, Zhong Wei, Yihui Mao and Liwei Ding. Internet of Things in Smart Heating Systems: Critical Technologies Progress and Prospect

2709*	Yirong Wu, Wenjing He, Shuifa Sun and Tinglong Tang. A Defect Detection Method Based on Parallel Multiple AutoEncoders
3854	Ning Zhang, Tianyue Qiu, Liulu Du-Ikonen, Xiaojie Lin, Qichao Ye and Jiaying Chen. Smart Energy Platform for Large-space Stadium Construction Based on Internet of Things
4187	Jian Zhou, Guodao Zhang, Liting Dai, Feiyue Qiu, Guangjie Zhou and Ruyu Liu. LiDAR Point Cloud Classification with Coordinate Attention Blueprint Separation Involution Neural Network
5476	Hong Qiu, Heng Jin, Renfang Wang, Xiufeng Liu and Guang Gao. Tensor Nuclear Norm Based Matrix Regression Based Projections for Feature Extraction of Hyperspectral Images

**C9: Industrial Internet, Internet of Things, Cyber-Physical Systems, Industry 4.0 (1),
Chair: Hongbo Sun**

155*	Junkai Fei, Xianjun Zhu and Ruyan Zhang. Evaluation of TCP Variants on Dynamic UAV Networks
799*	Bo Li, Wuwen Chen, Shicheng Jin and Yuhao Shi. DVFS-based Energy-saving Workflow Offloading Strategy in Mobile Edge Computing Environments
1244*	Guoqing Zhang, Hongbo Sun, Xin Liu and Lei Liu. A surface defect detection method based on Information Entropy
1858*	Meimei Li, Yuhan Li, Nan Li, Zhongfeng Jin, Jiguo Liu and Chao Liu. Intrusion Detection Method for SCADA System Based on Spatio-Temporal Characteristics
2391*	Xiuxian Li, Guiling Wang, Yongpeng Shi and Jian Yu. A Dynamic Binding Method for Situation-aware IoT Services Targeting Proactive BPM
2414*	Wanqiu Huang, Hanrong Zhang, Peng Peng and Hongwei Wang. Multi-gate Mixture-of-Expert Combined with Synthetic Minority Over-sampling Technique for Multimode Imbalanced Fault Diagnosis

**C10: Industrial Internet, Internet of Things, Cyber-Physical Systems, Industry 4.0 (2),
Chair: Hongbo Sun**

2622*	Xin Liu, Hongbo Sun, Guoqing Zhang and Lei Liu. A machine vision-based deep learning method in hemodialysis filter defects detection
2635*	Xiaotong Lei, Zhe Yang, Yunwei Huang, Jianyu Long, Chuan Li and Huiyu Huang. Anomaly Detection of Rolling Element Bearings Based on Contrastive Representation
2703*	Zhiheng Zhang, Guowei Wu and Kaiwen Ning. Optimizing The Access Control System for IOTA Tangle: A Game-Theoretic Perspective
2979	Xiaojiao Xie and Pengwei Zhan. Improving the Quality of Textual Adversarial Examples with Dynamic N-gram Based Attack
4376	Yuqi Wang, Gaofeng Zhang, Yanhe Fu, Gang Xu, Fengqi Wei and Kun Yan. AD-AC Opportunistic Routing Algorithm Based on Context Information of Nodes in Opportunistic Networks
5809	Gang Xu, Xinyu Hao, Zhihan Qi and Baoqi Huang. Node Importance Algorithm of Opportunistic Network Based on Social Properties of Nodes

C11: Collaborative Wireless Sensor Networks, Chair: Zhe Yang

1121*	Yongfei Liu, Hong Li, Wenyuan Zhang, Fei Lv and Shuaizong Si. Intrusion Detection Based on Sampling and Improved OVA Technique on Imbalanced Data
1699*	Zhengyu Hou, Wuyungerile Li, Qinan Li and Bing Jia. A Multipath Routing Protocols based on Node Multi-Performance in Mobile Ad hoc Networks
3556	Qingxin Liu, Xiaojun Zhu, Chuanxin Zhou and Chao Dong. Advanced Fast Recovery OLSR Protocol for UAV Swarms in the Presence of Topological Change
4959	Tiantian Wang, Lei Liu, Hongbo Sun and Jia Hu. UAV Enabled Sustainable IoT Network with OTPDRL
6142	Jiawei Huang, Aimin Wang, Geng Sun and Jiahui Li. Jamming-aided Maritime Physical Layer Encrypted Dual-UAVs Communications Exploiting Collaborative Beamforming
7409	Kang Chen, Peng Li, Weiyi Huang, Lei Nie, Haizhou Bao and Qin Liu. Quality-Oriented Task Assignment for Heterogeneous Users in Mobile Crowdsensing

C12: Collaborative Workflows, Chair: Chaokun Zhang

4775	Heng Wang, Guijuan Zhang, Hong Liu and Dianjie Lu. Singular Value Decomposition Based Pedestrian Trajectory Prediction
4939	Aojia Lv, Chaokun Zhang and Shen He. EMAR: Edge-Assisted Multi-User Mobile Augmented Reality
5488	Huan Jiang, Zihao Wang, Yuwei Peng, Rongrong Li, Zhiyong Peng and Bin Xu. CAT: A Collaborative Annotation Tool for Chinese Genealogy Textual Documents
8373	Yuxin Chen, Yue Hong and Caie Wang. An improved Priority-Based Level Algorithm for just-in-time scheduling
9522	Yingmeng Gao, Jie Zhu, Haiping Huang and Chen Chen. Latency-aware Partial Task Offloading in Collaborative Edge Computing
9870	Chen Chen, Jie Zhu, Haiping Huang and Yingmeng Gao. Energy-Constrained Task Scheduling in Heterogeneous Distributed Systems

D1: Collaborative Processing of Big Data (1), Chair: Tun Lu

3486	Mingxia Zhao and Adele Lu Jia. Multi-View Heterogeneous Graph Attention Network
3520	Feiyu Wang, Jian-Tao Zhou and Xu Guo. BMDP:Blockchain-Based Multi-Cloud Storage Data Provenance
3811	Fuqing Zhao, Yuebao Liu and Tianpeng Xu. Iterative Greedy Selection Hyper-heuristic with Linear Population Size Reduction
3937	Yufeng Fu, Xiangge Li, Ce Shang, Hong Luo and Yan Sun. ZoIE A Zero Shot Open Information Extraction Model Based on Language Model
3974	Xiaotong Wu and Wenan Tan. A Novel of Proactive Caching Policy for Privacy-Preserving Using Federated Learning and Lottery Hypothesis in Edge Computing
4802	Tianshu Fu, Guanqun Liu, Xin Wang, Daren Zha and Jiahui Shen. RZSR Randomly Initialized Zero-Shot Method for Blind Super-Resolution

D2: Collaborative Processing of Big Data (2), Chair: Long Wen

5219	Haozhe Wu, Hua Dai, Guineng Zheng, Meng Lu, Xiaofei Ji and Weihong Yang. HSFV-based Action Recognition Using Recurrent Neural Networks
5372	Lei Sun and Xiaolong Xu. SNNLog: A Log Parsing Scheme with Siamese Network and Fixed Depth Tree in Networks

5790	Mengying Xu, Hanjiang Lai and Jian Yin. CLIP-HASH: A Lightweight Hashing Network for Cross-Modal Retrieval
5946	Ling Zhang, Rongnan Luo, Xiaojie Mei and Wenchao Jiang. A Collaborative Learning Method based on Cross-domain Representation Correlation Congruence Distillation
6256	Chundong Wang and Yue Li. A Copyright Authentication Method Balancing Watermark Robustness and Data Distortion
6419	Meng Fanshuo, Peng Li, Weibei Fan, Zhang Hongjun, Xue Zhuangzhuang and Cheng Haitao. BPTTD: Block-Parallel Singular Value Decomposition(SVD) Based Tensor Train Decomposition

D3: Security and Privacy in Collaborative Systems (3), Chair: Hua Dai

4483	Zhao Li, Jiangchao Chen, Xiaoqing Ma, Meijie Du, Zhongyi Zhang and Qingyun Liu. A Robust and Accurate Encrypted Video Traffic Identification Method via Graph Neural Network
4809	Yue Ma, Zhengwei Jiang, Jun Jiang, Kai Zhang, Zhiting Ling and Peian Yang. Phishifter: An Enhanced Phishing Pages Detection Method Based on the Relevance of Content and Domain
4810	Yafeng Song, Ming Yang, Qi Chen, Xiaodan Gu and Yixuan Yao. Evaluating the Distinguishability of Tor Traffic over Censorship Circumvention Tools
5038	Weihao Huang, Chaoyang Lin, Qiucun Yan, Lu Xiang, Zhiyu Zhang, Guozhu Meng and Kai Chen. FMDiv: Functional Module Division on Binary Malware for Accurate Malicious Code Localization
5164	Wenjing Cai, Ziyuan Zhu, Yuxin Liu, Yusha Zhang and Xu Cheng. Detecting and Mitigating Cache Side Channel Threats on Intel SGX
5305	Zijun Cheng, Rujie Dai, Leiqi Wang, Ziyang Yu, Qiujian Lv, Yan Wang and Degang Sun. GHunter: A Fast Subgraph Matching Method for Threat Hunting

D4: Security and Privacy in Collaborative Systems (4), Chair: Puming Wang

5428	Yixiang Zhao, Zhou Zhou, Jiang Guo, Wei Yang, Shu Li and Qingyun Liu. DarkFT: Automatic Scanning Behavior Analysis with FastText in Darknet Traffic
5644	Dali Zhu, Hongju Sun, Nan Li, Baoxin Mi and Xianjin Huang. SPYRAPTOR: A Stream-based Smart Query System for Real-Time Threat Hunting within Enterprise
5891	Xinyan Li, Yujia Zhu, Xiaou Zhang, Zhen Jie and Qingyun Liu. SpoofingGuard: A Content-agnostic Framework for Email Spoofing Detection via Delivery Graph
5909	Yuzhang Wu and Beilun Wang. A Framework Using Absolute Compression Hard-Threshold for Improving The Robustness of Federated Learning Model
6340	Jiahao Hu, Mingpei Cao, Xizhe Zhang, Xiong Zhang and Yuesheng Zhu. Temporal Weighted Heterogeneous Multigraph Embedding for Ethereum Phishing Scams Detection
6351	Liu Jihong, Neng Gao, Chenyang Tu, Yifei Zhang and Yongjuan Sun. A Pure Hardware Design and Implementation on FPGA of WireGuard-based VPN Gateway

D5: Security and Privacy in Collaborative Systems (5), Chair: Kunkun Peng

6361	Jiaqi Liu, Kaiyu Huang and Lunchen Xie. HeteFed: Heterogeneous Federated Learning with Privacy-Preserving Binary Low-Rank Matrix Decomposition Method
6776	Fengyuan Shi, Zhou Zhou, Wei Yang, Shu Li, Qingyun Liu and Xiuguo Bao. AHIP: An Adaptive IP Hopping Method for Moving Target Defense to Thwart Network Attacks

7251	Dongdong Zhao, Ying Chen, Jianwen Xiang and Huanhuan Li. DLMT: Outsourcing Deep Learning with Privacy Protection Based on Matrix Transformation
7395	Dong Liu, Can Wang, Weidong Zhang, Xuangou Wu. Matrix of Fused Features-based Approach for Tor Application Classification
7467	Zhen Liu, Meiju Yu and Ru Li. Blockchain-Based Trust Management Mechanism in V-NDN
7679	Xizhe Zhang, Xiong Zhang, Jiahao Hu and Yuesheng Zhu. A New Targeted Online Password Guessing Algorithm Based on Old Password

D6: Security and Privacy in Collaborative Systems (6), Chair: Puming Wang

7892	Xinze Yu, Yunzhou Xie, Qiuji Xu, Zhuqing Xu and Runqun Xiong. Secure Data Sharing for Cross-domain Industrial IoT based on Consortium Blockchain
8070	Meng Luo, Liling Xin, Yepeng Yao, Zhengwei Jiang, Qiuyun Wang and Wenchang Shi. Who Are Querying For Me? Egress Measurement For Open DNS Resolvers
8163	Wei Cai, Chengshang Hou, Chang Liu, Gaopeng Gou, Gang Xiong and Zhen Li. PTC: Prompt-based Continual Encrypted Traffic Classification
8248	Meijie Du, Minchao Xu, Kedong Liu, Weitao Tang, Lijuan Zheng and Qingyun Liu. Long-Short Terms Frequency: A Method for Encrypted Video Streaming Identification
8713	Ri Wang, Chen Li and Ruibang You. Continuous User Trust Assessment Based on Emphasized Contextual Differentiation Behavior Analysis
8855	Tianyang Cai, Yuqi Li, Tao Jia, Leo Zhang and Zheng Yang. Catch Me If You Can: A New Low-Rate DDoS Attack Strategy Disguised by Feint

D7: Security and Privacy in Collaborative Systems (7), Chair: Puming Wang

8970	Xiaoqing Ma, Chao Zheng, Zhao Li, Jiangyi Yin, Qingyun Liu and Xunxun Chen. Detecting Fake-Normal Pornographic and Gambling Websites through one Multi-Attention HGNN
9351	Yibo Xie, Gaopeng Gou, Gang Xiong, Zhen Li and Mingxin Cui. Covertness Analysis of Snowflake Proxy Request
9815	Pan Yao, He Wang, Chao Zheng, Jing Yang and Liming Wang. Efficient Federated Learning Aggregation Protocol Using Approximate Homomorphic Encryption
9822	Gewangzi Du, Liwei Chen, Tongshuai Wu, Xiong Zheng, Ningning Cui, Gang Shi and Xiong Zheng. Cross Domain on Snippets: BiLSTM-TextCNN based Vulnerability Detection with Domain Adaptation
9871	Chenguang Zhu, Tongshuai Wu, Ningning Cui, Xiong Zheng, Liwei Chen and Gang Shi. Code Property Graph based Vulnerability Type Identification with Fusion Representation
6060	Min Feng, Meiju Yu and Ru Li. Multi-feature content popularity prediction algorithm based on GRU-Attention in VNDN

D8: Special Session: Adaptive Collaboration Systems (2), Chair: Shaohua Teng

3768	Shiyu Wu, Meiqiao Pan, Yanyan Fan, Shenglin Li and Libo Zhang. Group Role Assignment with a Training Plan Considering the Duration in Adaptive Collaboration
5630	Ziqi Xiong, Haibin Zhu, Dongning Liu and Jianhui Xian. Industrial Chain Data Evaluation in Automobile Parts Procurement via Group Multirole Assignment
5967	Ming Tao, Xueqiang Li, Renping Xie and Kai Ding. Pedestrian Identification and Tracking within Adaptive Collaboration Edge Computing

6019	Xiao-Min Hu, Yi-Qian Zhao and Zhuo Yang. Nodes Grouping Genetic Algorithm for Influence Maximization in Multiplex Social Networks
6642	Donglin Liang, Longfei Ma, Hongna Lou, Liangjie Yu and Yan-Jun Shi. An Adaptive Algorithm to Offload Task for User's QoE in the Vehicular Edge System
7191	Xiao-Min Hu, Gang-Qi Wang, Min Li and Zi-Liang Chen. A Signal Control Algorithm of Urban Intersections based on Traffic Flow Prediction

D9: Special Session: Adaptive Collaboration Systems (3), Chair: Haibin Zhu

8374	Yanxuan Wei, Yunxia Wang, Mingsen Du, Yupeng Hu and Cun Ji. Adaptive Shapelet Selection for Time Series Classification
8535	Wangbing Cheng, Minfeng Zhang, Fang Dong and Shucun Fu. Accelerate Multi-view Inference with End-edge Collaborative Computing
8558	Shen He, Chaokun Zhang, Aojia Lv, Jingshun Du and Wenyu Qu. Multi-Modal Deep Reinforcement Learning for Edge-Assisted Video Analytics
8679	Senyue Zhang, Ling Xue, Lu Zhao, Weiliang Huang and Ke Li. Single Application Service Deployment in the Edge Environment Based on the E-CARGO Model
9721	Qin Qin, Chao Tan, Chong Li and Genlin Ji. Privileged Label Enhancement with Adaptive Graph
9800	Ziqing Ye, Haibin Zhu, Dongning Liu and Jianhui Xian. Outsourced Products Task Allocation via Group Multirole Assignment with Considering Variance

**D10: Special Session: Advanced Computing For Industrial Internet of Things (2),
Chair: Jianhua Zhang**

6204	Di Chen, Xinyi Li, Ang Li and Yubin Yang. Representation-based Time Series Label Propagation for Active Learning
6260	Jiayu Zhang, Guiling Wang, Yongpeng Shi, Xin Zheng and Jian Yu. Spatial-Temporal Aware Business Event Forecasting for Proactive Services from IoT Sensory Data
7456	Yanhao Feng, Xiaojie Lin and Zitao Yu. Internet of Things in Power Systems: A Bibliometric Analysis
8368	Renfang Wang, Zijian Yang, Hong Qiu, Xiufeng Liu and Dun Wu. Spatial and Channel Exchange based on EfficientNet for Detecting Changes of Remote Sensing Images
8601	Fei Han, Yao Zhang and Meng Zhao. Defending Poisoning Attacks in Federated Learning via Loss Value Normal Distribution
8700	Han Yue, Rucen Wang, Yi Gao, Ailing Xia and Jianhua Zhang. DSP-Based Industrial Defect Detection for Intelligent Manufacturing

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6347	Beibei Cheng, Yiming Zhu, Yuxuan Chen, Xiaodan Gu and Kai Dong. Privacy Protection Based on Packet Filtering for Home Internet-of-Things
6583	Hong Zhao, Liyi Han and Weijie Wang. Detection of COVID-19-related Malicious Domain Names Based on Feature Fusion
6653	Pengfei Song, Luoyu Mei and Han Cheng. Human Semantic Segmentation using Millimeter-Wave Radar Sparse Point Clouds
7332	Yanhui Chen, Yun Feng, Chengchun Wang, Jianjun Zhao and Qixu Liu. DeepCall: A Fast and Robust Malware Classification System with DGCNN and Function Call Graph

7571	Bo Li, Zisu Na, Rongrong Qian and Hongwei Ding. QoS and Fuzzy Logic Based Communication Handover Strategy in 5G Cellular Internet of Vehicles
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7720	Luyao Xu, Cheng Xie and Yuran Dong. A Normalizing Flow-based Unsupervised Anomaly Detection Approach
7904	Xiong Zhang, Zhenyu Weng, Xizhe Zhang, Jiahao Hu and Yuesheng Zhu. Zero-Shot Offline Handwritten Chinese Character Recognition with Graph Embedding
8962	Xie Yin, Luo Yigui, She Haihong and Xiang Zhaohong. Neural Network Model Pruning without Additional Computation and Structure Requirements
9086	Weihong Yang, Hua Dai, Meng Lu, Guineng Zheng, Geng Yang and Haozhe Wu. A Human Pose Similarity Calculation Method Based on Partition Weighted OKS Model
9409	Yubo Wang and Xiaolong Xu. An Industrial Internet of Things-oriented Malicious Traffic Detection Network with Neural Network Partial Architecture Search
9933	Kai Chen, Xiangmao Chang, Jun Zhan and Yanchao Zhao. Measurement and Optimization of Repetition Scheme in NB-IoT Uplink