

International Conference on High Performance Big Data and Intelligent Systems (HDIS 2023)

Conference Schedule

Main Conference Venue
UM Guest House Multi-function Hall (N1-G014)
澳门大学聚贤楼N1地面层多功能厅G014

December 5, 2023 (Beijing Time)	
14:00-18:00	Conference Check in and Materials Collection
December 6, 2023 (Beijing Time)	
08:30-08:45	Welcome Speech Cheng-Zhong Xu , University of Macau Kejiang Ye , Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
08:45-09:00	Group Photo
Keynote Speech Chair: Cheng-Zhong Xu , University of Macau	
09:00-09:55	Networking Implications of Video Analytics Xiaoming Fu , Chair Professor of Computer Science at the Institute of Computer Science, University of Göttingen, Germany.
09:55-10:50	Dataflow based High Efficient Graph Processing Accelerator Hai Jin , Chair Professor of computer science and engineering at Huazhong University of Science and Technology (HUST), China.
10:50-11:10	Coffee Break
Session A-1: High Performance Computing Technologies and Applications I Session Chair: Huanle Xu , University of Macau	
11:10-11:40	Invited Talk Benchmarking And Dissecting The NVIDIA Hopper GPU Architecture Xiaowen Chu , Professor, Hong Kong University of Science and Technology (Guangzhou)
11:40-12:10	Invited Talk Towards Low Latency Serverless Computing For Complex Applications Quan Chen , Professor, Shanghai Jiao Tong University
12:20-14:00	Conference Lunch (Buffet)
Session A-2: Intelligent Technologies and Applications I Session Chair: Jianbing Shen , University of Macau	
14:00-14:30	Invited Talk Visual 3D Reconstruction in Autonomous Driving Wei Sui , Senior Engineer, Horizon Robotics
14:30-14:45	Citrus Diseases and Pests Image-Text Retrieval Based on Multi-Modal Transformer Xingyu Liu , China Agricultural University
14:45-15:00	ANN-based Approach to Modeling Energy Bands of GaN-based Heterojunction Material Meilan Hao , AnnLab, Institute of Semiconductors, Chinese Academy of Sciences
15:00-15:15	Leftover: Improving Large Language Model Inference Efficiency by Leveraging Idle Resources Gao Hong , Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
15:15-15:25	Revolutionizing Indoor Air Quality: An Intelligent IoT Solution for Pollution Detection Karim H Moussa , Xi'an Jiaotong Liverpool University
15:25-15:35	An Approach for Multi-Object Tracking with Two-Stage Min-Cost Flow Huining Li , Beihang University
15:35-15:55	Coffee Break
Session A-3: Intelligent Technologies and Applications II Session Chair: Shuai Wang , Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences	
15:55-16:25	Invited Talk Advanced Scene Understanding And Decision-Making For Autonomous Driving Wenchao Ding , Associate professor, Fudan University
16:25-16:40	Machine Learning based Radar Heatmap Generation for Advanced Driver Assistance Systems Angela Mariama Klassen , University of Rhode Island
16:40-16:55	Interference Detection of Colocation Workloads in Sidecar Cluster Ruihong Gao , Southern University of Science and Technology
16:55-17:10	Optimizing FPGA-based DCN Accelerator with On-Chip Dataflow Reordering and Serial-Parallel Computing Array Ming Zhang , AnnLab, Institute of Semiconductors, Chinese Academy of Sciences
17:10-17:25	Feature Reduction-based Intrusion Detection (FRID) in Satellite-Terrestrial Integrated Networks Ziyuan Tian , Dalian University of Technology
17:30-20:30	Conference Reception (UM N1)

December 7, 2023 (Beijing Time)	
Keynote Speech Chair: Junwen Zhong , University of Macau	
09:00-09:55	Linear Processing for Vector-Valued Signals with Vector-Valued Coefficients Xiang-Gen Xia , Charles Black Evans Professor in Department of Electrical and Computer Engineering University of Delaware, USA.
09:55-10:50	Ultra-flexible organic electronics for health monitoring Tomoyuki Yokota , Associate Professor in Graduate School of Engineering at the University of Tokyo, Japan.
10:50-11:10	Coffee Break
Session A-4: High Performance Computing Technologies and Applications II Session Chair: Minxian Xu , Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences	
11:10-11:40	Invited Talk Towards Cost-Efficient DNN Model Training And Inference Serving With Serverless Pipelines Zhi Zhou , Associate professor, Sun Yat-sen University
11:40-11:55	CJT:Boosting the Transferability of Adversarial Attacks with Color Jitter Transformation Linlin Zeng , Guangzhou University
12:20-14:00	Conference Lunch (Buffet)
Session A-5: Intelligent Technologies and Applications III Session Chair: Hui Kong , University of Macau	
14:00-14:30	Invited Talk Lidar-Based Autonomous UAVS Fu Zhang , Assistant Professor, University of Hong Kong
14:30-15:00	Invited Talk Research Advances in Edge Intelligence of UAVs Haipeng Dai , Associate professor, Nanjing University
Session A-6: Best Paper Award Candidate Session Session Chair: Weijun Li , Institute of Semiconductors, Chinese Academy of Sciences	
15:00-15:15	From LeanStore to LearnedStore: Using a Learned Index to Improve Database Index Search Song Jiang , University of Texas at Arlington
15:15-15:30	A Stationary Random Process based Privacy-Utility Tradeoff in Differential Privacy Hongmiao Yan , Dalian University of Technology
15:30-15:45	DoctorGPT: A Large Language Model with Chinese Medical Question-Answering Capabilities Wenqiang Li , AnnLab, Institute of Semiconductors, Chinese Academy of Sciences
15:45-16:00	SMFENet: Stage-Aware Multi-Scale Feature Extraction Network for Real-Time Semantic Segmentation of Street Scenes Ziming Li , Guangzhou University
16:00-16:15	Maize haploid identification using hyperspectral imaging and dual-branch CNN Liu Zhang , China Agricultural University
16:15-16:35	Coffee Break
Panel Discussion: Systems Support for Large Language Models and AI Applications Panel Chair: Song Guo , Professor, IEEE Fellow, The Hong Kong University of Science and Technology (HKUST)	
16:35-18:00	Panelists: Guihai Chen , Professor, IEEE Fellow, Nanjing University, China. Song Jiang , Professor, University of Texas at Arlington, USA. Xiaowen Chu , Professor, The Hong Kong University of Science and Technology (Guangzhou), China. Chuan Wu , Professor, The University of Hong Kong, China.
19:00-21:00	Conference Banquet (W Hotel)
December 8, 2023 (Beijing Time)	
Keynote Speech Chair: Xiaobo Zhou , University of Macau	
09:00-09:55	Learning with Graphs Roger Wattenhofer , Full professor at the Information Technology and Electrical Engineering Department, ETH Zurich, Switzerland.
Session A-7: Intelligent Technologies and Applications IV Session Chair: Jiantao Zhou , University of Macau	
09:55-10:25	Invited Talk Optimizing Distributed DNN Training in AI Clouds Chuan Wu , Professor, Hong Kong University
10:25--10:55	Invited Talk Human-Computer Interaction in Intelligent Cockpit Cong Yang , Associate professor, Soochow University
10:55-11:15	Coffee Break
Session A-8: MetaRacing Session Chair: Ryan Leong Hou U , University of Macau	
11:15--12:15	MetaRacing Showcase & Awards https://contests.cis.um.edu.mo/meta_racing_2023/
12:15-12:25	Closing Ceremony Cheng-Zhong Xu , University of Macau
12:30-14:00	Conference Lunch (Buffet)

Parallel Session Venue
UM Guest House 1st Floor (N1-1005)
澳门大学聚贤楼N1一楼1005室

December 6, 2023 (Beijing Time)

Session B-1: High Performance Computing & Big Data Technologies and Applications

Session Chair: **Chengxi Gao**, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

11:10-11:25	Enhance Multi-domain Sentiment Analysis of Review Texts through Prompting Strategies Yajing Wang, BNU-HKBU United International College
11:25-11:40	Time-aware Relay Chain-based Committee Consensus for Decentralized Identity Hong Zhang, Beijing Institute of Technology
11:40-11:55	INTOP: Improving Nginx Performance by Tuning OS Parameters Wenxiong Chen, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
11:55-12:05	Phase of Flight Classification in Aviation Safety using LSTM, GRU, and BiLSTM: A Case Study with ASN Dataset Hassan Wasswa, University of New South Wales
12:05-12:15	An Improved Deep Reinforcement Learning-Based Multi-Agent Cooperative Game Approach Zhongqi Zhao, Xi'an University of Technology
12:20-14:00	Conference Lunch (Buffet)

Session B-2: Intelligent Technologies and Applications V

Session Chair: **Min Wu**, Institute of Semiconductors, Chinese Academy of Sciences

14:00-14:15	Music-driven Motion Generation for Fashion Show via MP Loss Zeyu Yan, Donghua University
14:15-14:30	Deep Embedding Clustering on Citation Networks for Community Detection Hailong Peng, Xi'an University of Technology
14:30-14:45	Three-Dimensional Data Security Architecture of Agricultural Supply Chain Driven by Blockchain Guofeng Zhang, Taishan University
14:45-15:00	PIFU-RGBD: Single-view RGB-D Pixel-aligned Implicit Function for 3D Human Reconstruction Yingli Wang, South China Normal University
15:00-15:15	Larger receptive Field and Context Information for Pose estimation: Larger Gaussian kernel Junxiao Ma, Beijing Forestry University
15:15-15:25	Research on the Application of Drone Remote Sensing and Target Detection in Civilian Fields Xiaochen Gao, Inner Mongolia University
15:25-15:35	DFS-enhanced Lightgbm: an extended Lightgbm model applied to ICU heart failure mortality prediction Zehang Lin, Xiamen University of Technology
15:35-15:55	Coffee Break

Session B-3: Intelligent Technologies and Applications VI

Session Chair: **Zhiwei Li**, Institute of Semiconductors, Chinese Academy of Sciences

15:55-16:10	Relative Gradient Matching Cost for Mitigating Feature Discrepancies in Stereo Matchin Changlin Liu, South China Normal Univeristy
16:10-16:25	Design of Perception Layer for Monitoring System in Intelligent Animal Husbandry Qianjun Chang, China Agricultural University
16:25-16:40	Quadruple Extraction Algorithm for Building Temporal Knowledge Graphs for Pasture Zhongwen Li, Southwest Minzu University
16:40-16:55	Video Arbitrary Style Transfer via Style Attention and Contrastive Learning Yangyang Qian, University of Shanghai for Science and Technology
16:55-17:10	Competitive Swarm Optimizer Based on Individual Learning Mechanism Jingqi Tang, Xi'an University of Technology
17:10-17:25	Digital Infrastructure Layout Based on New Power System Research on Key Technologies of Strategy Yan Li, State Grid Electric Power Research Institute
17:30-20:30	Conference Reception (UM N1)

December 7, 2023 (Beijing Time)

Session B-4: Intelligent Technologies and Applications VII

Session Chair: **Yang Fei**, Institute of Semiconductors, Chinese Academy of Sciences

11:10-11:25	A Verifiable Dispersal Consensus and Identity Aggregation-based Trustworthy Decentralized Identity Governance Yiwei Feng, Beijing Institute of Technology
11:25-11:40	Deep Learning Strategies for Addressing Anomalous Exposure in Image Processing: The FARDBUNet Approach Qi Zhou, South China Normal University
11:40-11:55	FPGA implementation of CNN-LSTM classifier in speech emotion recognition system Zhaogang Gao, China Agricultural University
11:55-12:05	Travel Attractions Recommendation based on Attentive Group Recommendation Algorithm Junzhi Cheng, Xi'an University of Technology
12:20-14:00	Conference Lunch (Buffet)