Bench Council 国际测试委员会 | FICC 2023

2023国际测试委员会
智能计算机与芯片联邦大会

2023 BenchCouncil International Federated Intelligent Computing and Chip Conference

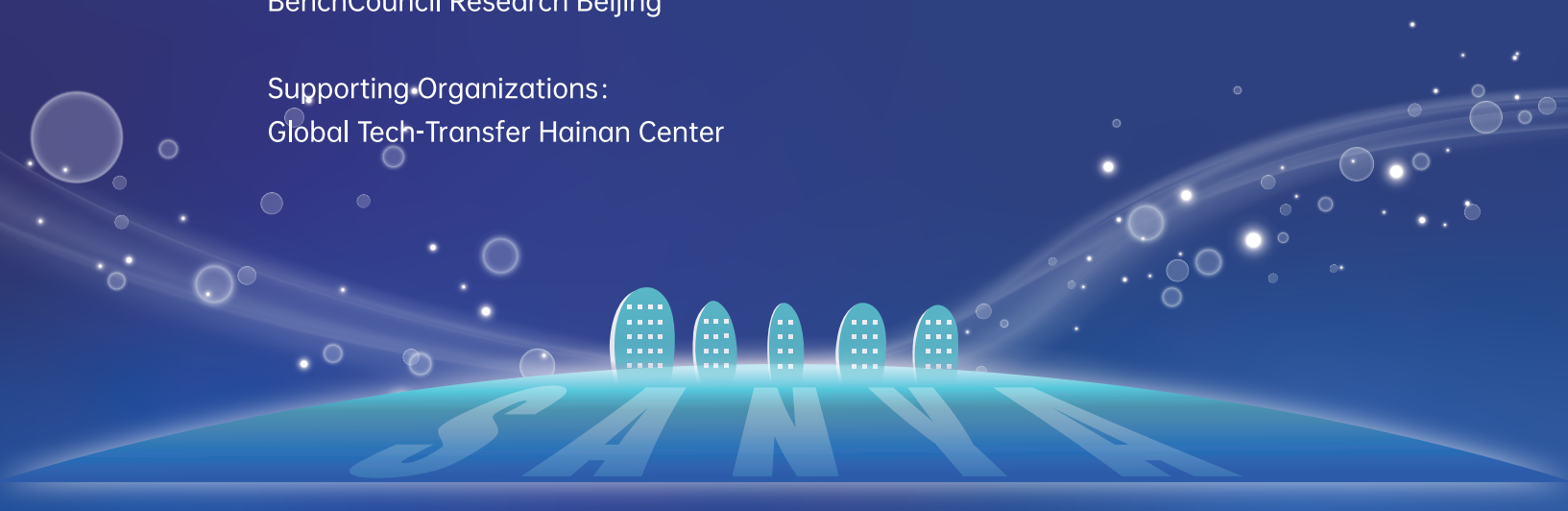
Conference Schedule

Guiding organizations:
The People's Government of Sanya City
Bureau of International Cooperation, Chinese Academy of Sciences

Host organizations:
Hong Kong AI and Chip Benchmark Research Limited
International Open Benchmark Council

Operating Organizations:
Bureau of Science, Technology, Industry and Information, The People's Government of Sanya City
Sanya Technology Investment Group Corporaton
BenchCouncil Research Beijing

Supporting Organizations:
Global Tech-Transfer Hainan Center



Day 1, Sunday, Dec. 3 Plenary Session: Morning (Hall D, 3rd Floor, International Convention Center)

Time	Event	Guests & Hosts
8:00-8:10	Opening Remarks, Vice President of Chinese Academy of Sciences	
8:10-8:20	Opening Remarks, Local Government Official	
8:20-8:25	Introduction to BenchCouncil Achievement Award (Video)	
8:25-8:30	Award Ceremony: 2023 BenchCouncil Achievement Award	Award and Keynote Chair: Prof. Jianfeng Zhan, Prof. D.K. Panda
8:30-9:10	Keynote 1 - Essentially, All Models Are Wrong, but Some Are Useful	Prof. Lieven Eeckhout, Ghent University
9:10-9:15	Introduction to BenchCouncil Rising Star Award (Video) Award Ceremony: 2023 BenchCouncil Rising Star Award	Award Session Chair: Prof. Jianfeng Zhan
9:15-9:20	Opening Remarks of OpenCS 2023	Prof. Guangnan Ni and Prof. D.K. Panda
9:20-9:25	Open100 (1960s-2021, RFC): A Centennial Edition of Top 100 Open Source Achievements (Video)	Award Session Chair: Dr. Lei Wang
9:25-9:30	Award Ceremony: Open100 (1960s-2021, RFC) -- Bruce Perens	Award and Keynote Chair: Dr. Lei Wang
9:30-10:10	Keynote 2 - Open Source: The Past, Present, and Future	Bruce Perens, Co-founder of the Open Source Initiative
10:10-10:15	Opening Remarks of Bench 2023	Prof. Rakesh Agrawal and Prof. Aoying Zhou
10:15-10:55	Keynote 3 - Designing High-Performance and Scalable Middleware and Benchmarks for HPC, AI, and Data Sciences	Prof. D. K. Panda, The Ohio State University (Keynote Chair: Prof. Weining Qiang)
10:55-11:00	Bench100 (1896-2021, RFC): A Centennial Edition of Top 100 Benchmarks & Evaluation Achievements (Video)	Award Session Chair: Dr. Chunjie Luo
11:00-11:05	Opening Remarks of IC 2023	Prof. Tao Tang and Prof. Weiping Li
11:05-11:10	AI100 (1943-2021, RFC): A Centennial Edition of Top 100 AI Achievements (Video)	Award Session Chair: Dr. Wanling Gao
11:10-11:15	Award Ceremony: Xiangshan - Open100 (1960s-2021, RFC)	Contributors: Prof. Yungang Bao, Dr. Dan Tang. (Award and Keynote Chair: Prof. Lieven Eeckhout)
11:15:-11:55	Keynote 4 - New trend of processor: open source chips	Prof. Yungang Bao, Institute of Computing Technology, Chinese Academy of Sciences
11:55-12:00	Opening Remarks of Chips 2023	Prof. Depei Qian
12:00-12:05	Chip100 (1943-2021, RFC): A Centennial Edition of Top 100 Chips Achievements (Video)	Award Session Chair: Dr. Guoxin Kang
12:05-12:10	Award Ceremony: Chip100 (1940s-2021, RFC) --Steve Furber	Award and Keynote Chair: Dr. Guoxin Kang
12:10-12:20	Keynote 5 - Neuromorphic Computing	Prof. Steve Furber, University of Manchester

Day 1, Sunday, Dec. 3 Plenary Session: Afternoon (Hall D, 3rd Floor, International Convention Center)

14:00-14:40	Keynote 6 - Creating Intelligent Cyberinfrastructure for Democratizing AI: Overview of the Activities at the NSF-AI Institute ICICLE	Prof. D. K. Panda, The Ohio State University (Keynote Chair: Prof. Yanwu Yang)

Time	Event	Guests & Hosts
14:40-14:45	Award Ceremony: LSTM - AI100 (1943-2021, RFC) Contributors: Prof. Jürgen Schmidhuber	Award Session Chair: Dr. Wanling Gao
14:45-15:15	Keynote 7 - Correcting the first draft of the "Top 100 Al Achievements" by lOBC	Prof. Jürgen Schmidhuber, Father of LSTM, Fellow of the European Academy of Sciences, Co-founder of NNAISENSE (Keynote Chair: Prof. Weiping Li)
15:15-15:20	Chip100(2022-2023): An Annual Edition of Top 100 chips achievements	
15:20-15:25	Award Ceremony: OpenBLAS - Open100(1960s-2021, RFC)	Contributors: Prof. Yunquan Zhang, Dr. Xianyi Zhang (Award and Keynote Chair: Bruce Perens)
15:25-15:55	Keynote 8 - OpenBLAS: an optimized BLAS library based on GotoBLAS	Dr. Xianyi Zhang, Founder of PerfXLab
15:55-16:00	Open100 (2022-2023): An Annual Edition of Top 100 open source achievements (Video)	
16:00-16:05	Award Ceremony: Hetu - Annual Achievement Selection	Contributors: Prof. Bin Cui, et al. (Award and Keynote Chair: Dr. Biwei Xie)
16:05-16:35	Keynote 9 - Hetu: Efficient and Scalable Distributed Deep Learning Systems	Dr. Fangcheng Fu, Peking University
16:35-16:40	AI100 (2022-2023): An Annual Edition of Top 100 AI achievements (Video)	
16:40-16:45	Award Ceremony: Computational Storage Device - Annual Achievement Selection	Contributors: Prof. Yaodong Cheng, et al. (Award and Keynote Chair: Prof. Ke Zhang)
16:45-17:15	Keynote 10 - Computational Storage Device for Scientific Big Data	Prof. Yaodong Cheng, Institute of High Energy Physics, Chinese Academy of Sciences
17:15-17:20	Bench100 (2022-2023): An Annual Edition of Top 100 benchmarks & evaluation achievements (Video)	
17:20-17:25	Award Ceremony: TDengine - Open100 (1960s-2021, RFC)	Contributors: Jianhui Tao, et al. (Award and Keynote Chair: Dr. Sa Wang)
17:25-17:55	Keynote 11 - Open Source and Cloud Services: A Dual Engine for Innovating Industrial Software	Jianhui Tao, Founder of TAOS Data
17:55-18:00	Award Ceremony: FastStream - Open100 (2022-2023)	Contributors: Hajdi Cenan, Davor Runje. (Award and Keynote Chair: Prof. Zhifei Zhang)
18:00-18:30	Keynote 12 - FastStream: a powerful and easy-to-use Python framework for building asynchronous services interacting with event streams	Hajdi Cenan, Davor Runje (Airt.ai)
19:00-21:00	Banquet	

Day 2, Monday, Dec. 4: Morning

Chip100 and CFA Session 1: New technologies and New methods I
Multi-Purpose Hall 1, 1M Floor, International Convention Center

9:00-9:20	Decoupled Vector Runahead	Lieven Eeckhout（Ghent University）
9:20-9:40	SAC: Sharing-Aware Caching in Multi-Chip GPUs	Lieven Eeckhout（Ghent University）

Time	Event	Guests & Hosts
9:40-10:00	Automatically Constrained High-Performance Library Generation	Jun Bi（ICT, CAS）
10:00-10:20	Fast Logic Synthesis Prediction with Deep Learning	Ceyu xu（Duke）
10:20-10:40	Tea Break	
Open100 and CFA Session I: High-performance HW/SW technology Multi-Purpose Hall 1, 1M Floor, International Convention Center		
10:40-11:00	Xiangshan: Open-source high-performance RISC-V processor	Kaifan Wang，Yinan Xu （Beijing Institute of Open Source Chip、ICT CAS）
11:00-11:20	BUDDY MLIR: An MLIR-based compiler framework designed for a co-design ecosystem from DSL to DSA	Hongbin Zhang （Institute of Software Chinese Academy of Sciences）
11:20-11:40	STEED: A High Performance Analytical Database for JSON	Zhiyi Wang（ICT, CAS）
IC 2023 Invited talk Multi-Purpose Hall 5, 1M Floor, International Convention Center		
8:30-9:00	Artificial Intelligence-Based Identification of Psychological and Psychiatric Illnesses	Tingshao Zhu (Institute of Psychology, Chinese Academy of Sciences)
IC 2023 Session 1 - AI for Finance, Civil Aviation Multi-Purpose Hall 5, 1M Floor, International Convention Center		
9:00-9:20	Forecasting the price of Bitcoin using an explainable CNN-LSTM model	Sixian Chen (China University of Petroleum) Zonghu Liao (China University of Petroleum) Jingbo Zhang (China University of Petroleum)
9:20-9:40	Augmenting Bankruptcy Prediction using Reported Behavior of Corporate Restructuring	Xinlin Wang (University of Luxembourg) Mats Brorsson (University of Luxembourg)
9:40-10:00	3D Approach Trajectory Optimization Based on Combined Intelligence Algorithms	LI LU (Civil Aviation Flight University of China) Juncheng Zhou (Civil Aviation Flight University of China) Chen Li (Civil Aviation Flight University of China) Yuqian Huang (Civil Aviation Flight University of China) Jiayi Nie (Civil Aviation Flight University of China) Junjie Yao (Civil Aviation Flight University of China)
10:00-10:20	A-SMGCS: Innovation, Applications, and Future Prospects of Modern Aviation Ground Movement Management System	Jiahui Shen (Civil Aviation Flight University of China)
10:20-10:40	Interpretable prediction of commercial flight delay duration based on machine learning methods	Lin Zou (Civil Aviation Flight University of China) Jingtao Wang (Civil Aviation Flight University of China) Weiping Li (Civil Aviation Flight University of China) Jianxiong Chen (Civil Aviation Flight University of China)
IC 2023 Session 2 - AI for Medicine, Education Multi-Purpose Hall 5, 1M Floor, International Convention Center		
10:40-11:00	KGCN-DDA: a knowledge graph based GCN method for drug-disease association prediction	Hongyu Kang (Institute of Medical Information, Chinese Academy of Medical Sciences and Peking Union Medical College) Qin Li (Department of Biomedical Engineering, School of Life Science, Beijing Institute of Technology) Jiao Li (Institute of Medical Information, Chinese Academy of Medical Sciences and Peking Union Medical College) Li Hou (Institute of Medical Information, Chinese Academy of Medical Sciences and Peking Union Medical College)
11:00-11:20	Label-independent Information Compression for Skin Diseases Recognition	Geng Gao (School of Biomedical Engineering) Yunfei He (School of Biomedical Engineering) Li Meng (School of Biomedical Engineering) Jinlong Shen (School of Biomedical Engineering) Lishan Huang (School of Biomedical Engineering) Fengli Xiao (Department of Dermatology of First Affiliated Hospital, and Institute of Dermatology) Fei Yang (School of Biomedical Engineering)

Time	Event	Guests & Hosts
11:20-11:40	A new dataset and method for creativity assessment using the alternate uses task	Luning Sun (University of Cambridge) Hongyi Gu (Netmind.ai) Rebecca Myers (University of Cambridge) Zheng Yuan (King's college London)
Bench 2023 Session 1: Paper Session Multi-Purpose Hall 4, 1M Floor, International Convention Center		
9:00- 9:20	ICBench: Benchmarking Knowledge Mastery in Introductory Computer Science Education	Zhenying Li（ICT, CAS）
9:20- 9:40	MolBench: A Benchmark of AI Models for Molecular Property Prediction	Xiuyu Jiang（Sun Yat-sen University）
9:40-10:00	MMDBench: A Benchmark for Hybrid Query in Multimodal Database	Along Mao（Computer Network Information Center (CNIC), Chinese Academy of Sciences ）
10:00-10:20	AGIBench: A Multi-granularity, Multimodal, Human-referenced, Auto-scoring Benchmark for Large Language Models	Fei Tang（UCAS）
10:20-10:40	Generating High Dimensional Test Data for Topological Data Analysis	Rohit P. Singh （University of Cincinnati）
10:40-11:00	Does AI for science need another ImageNet Or totally different benchmarks? A case study of machine learning force fields	Yatao Li（Microsoft Research）
11:00-11:20	Cross-layer profiling of IoTBench	Fan Zhang（ICT, CAS）
11:20-11:40	Benchmarking Modern Databases for Storing and Profiling Very Large Scale HPC Communication Data	Dhabaleswar K. Panda （The Ohio State University）
11:40-12:00	A Linear Combination-based Method to Construct Proxy Benchmarks for Big Data Workloads	Yikang Yang（UCAS）
Workshop: Talents Education and Development for Open-source Computer Systems and Chips Multi-Purpose Hall 2, 1M Floor, International Convention Center		
9:00- 9:20	Talents Education and Development for Open-source Computer Systems and Processor Chips within the two organizations - CSP and RVEI	Ke Zhang（University of Chinese Academy of Sciences）
9:20- 9:40	Exploration of Teaching Reform on the Integration of Microcomputer Principles and Digital Circuits under Open ISA	Weitao Zhang（Xidian University）
9:40-10:00	Sharing experience in developing computer system capabilities in the "One Student One Chip" program	Zihao Yu（Beijing Institute of Open Source Chip）
10:00-10:20	The exploration of Open Atom Foundation in open source systems talent education	Yanguang Wang（Open Atom Foundation）
10:20-10:40	Tea Break	
10:40-11:00	Methods for evaluating developer contributions and incentive mechanisms	Xiaoya Xia（East China Normal University）
11:00-12:00	Open Discussion: Objectives, classification, model and evaluation for open-source chip talents education and development	
Day 2, Monday, Dec. 4: Afternoon		
Open100 and CFA Session 2: AI and LLM Multi-Purpose Hall 1, 1M Floor, International Convention Center		
14:00-14:20	FaceChain: a deep-learning toolchain for generating your Digital-Twin	Yang Liu（Alibaba）
14:20-14:40	AutoGen: Enabling Next-Gen AI Applications via Multi-Agent Conversation	Li Jiang，Wei Zheng（Microsoft）
14:40-15:00	CraneSched: An Intelligent Scheduling System	Ya Luo（Peking University）
15:00-15:20	YOLOv6: a single-stage object detection framework dedicated to industrial applications	Hongliang Jiang（Meituan）
15:20-15:40	Tea Break	

Time	Event	Guests & Hosts
Open100 and CFA Session 3: Frameworks and tools for emerging applications Multi-Purpose Hall 1, 1M Floor, International Convention Center		
15:40-16:00	Open-source user-space network stack and 3 test tools for C10M high concurrency	Wenli Zhang（ICT, CAS）
16:00-16:20	A Comprehensive Study on Code Clones in Automated Driving Software	Yingjie Jiang、Ran Mo (Central China Normal University)
16:20-16:40	TiDB: an open-source, cloud-native, distributed, MySQL-Compatible database for elastic scale and real-time analytics	Yuanjia Zhang（PingCAP）
16:40-17:00	DASICS: Enhancing Memory Protection with Dynamic Intra-Address Space Bounds	Yue Jin（ICT, CAS）
17:00-17:20	OpenDigger: An open source analysis report project	Xiaoya Xia（X-Lab）
17:20-17:40	openEuler: Bringing new opportunities to the diversified computing era	Jianwei Zhu（Huawei）
Chip100 and CFA Session 1: New technologies and New methods II Multi-Purpose Hall 5, 1M Floor, International Convention Center		
14:00-14:20	Memory Access Optimization Mechanism of FPGA-based Graph Computing Accelerator	Qinggang Wang (Huazhong University of Science and Technology)
14:20-14:40	Closed-loop Brain-Computer Interface Chip	Yishan Wang（SIAT,CAS）
14:40-15:00	AMG Multi-modal computing unit	XiaoFeng Hou（hanghai Jiao Tong University）
15:00-15:20	Microcomb-driven silicon photonic systems	XingJun Wang（Peking University）
15:20-15:40	Tea Break	
Chip100 and CFA Session 2: New architectures Multi-Purpose Hall 5, 1M Floor, International Convention Center		
15:40-16:00	SUSHI Superconductor Chip	Guangming Tang、Haihang You（ICT, CAS）
16:00-16:20	SERVE: Agile Cloud Hardware/Software Development Platform for Computer Systems Course Experiments	Ke Zhang（ ICT, CAS）
16:20-16:40	Specialized Accelerators for High-Performance Domains and Cross-Layer Performance Optimization	Xueqi Li（ ICT, CAS）
16:40-17:00	Intelligent Network Processor for Deterministic and In-Network Computing	Junnan Li (National University of Defense Technology)
IC 2023 Session 3 - AI for Law Multi-Purpose Hall 2, 1M Floor, International Convention Center		
14:00-14:20	A Levy Scheme for User-Generated-Content Platforms and its Implication for Generative AI Providers	Weijie Huang (Shenzhen University) Xi Chen (corresponding author) (Shenzhen University)
14:20-14:40	Moving Beyond Text: Leveraging Multi-modal Data to Enhance AI's Understanding of Legal Reasoning through Rebuttals	Jiaxing Li (Nankai University)
14:40-15:00	The Worldwide Contradiction of the AIGC Regulatory Theory Paradigm and China's Response: Focus on the Theories of Normative Models and Regulatory Systems	Laitan Ren (The Law School of Hainan University) Jingjing Wu (The Law School of Hainan University)
15:00-15:20	Learning Deep Features for Trademark Law Prediction Based on TF-IDF and XGBoost	Qun Wang (Shanghai Maritime University) Shuhao Qian (Shenzhen Research Institute of Big Data) Jiahuan Yan (East China University of Political Science and Law) Hao Wang (Tongji University) Xiaotao Guo (Hangzhou Dianzi University)
15:20-15:40	Review of Big Data Evidence in Criminal Proceedings: Basis of Academic theory, Practical Pattern and Mode Selection	Yicheng Liao（Zhejiang University）

Time	Event	Guests & Hosts
IC 2023 Session 4 - AI for Ocean, Space Multi-Purpose Hall 2, 1M Floor, International Convention Center		
15:40-16:00	Diffusion Probabilistic Models for Underwater Image Super-Resolution	Kai Wang (Ocean University of China) Guoqiang Zhong (Ocean University of China)
16:00-16:20	Classification Method for Ship-Radiated Noise Based on Joint Feature Extraction	Libin Du (Shandong University of Science and Technology) Mingyang Liu (Shandong University of Science and Technology) Zhichao Lv (Shandong University of Science and Technology) Zhengkai Wang (Shandong University of Science and Technology) Lei Wang (Shandong University of Science and Technology) Gang Wang (Shandong University of Science and Technology)
16:20-16:40	Semantic retrieval of Mars data using contrastive learning and convolutional neural network	Yun-Long Li (National Space Science Center, Chinese Academy of Sciences) Ci-Feng Wang (National Space Science Center, Chinese Academy of Sciences) Jia Zhong (National Space Science Center, Chinese Academy of Sciences) Yang Lu (National Space Science Center, Chinese Academy of Sciences)
16:40-17:00	RingMo: A Remote Sensing Foundation Model with Masked Image Modeling	Feng Yingchao
17:00-17:20	Machine Learning Techniques for Automatic Detection of ULF waves	Shaofeng Fang (National Space Science Center, Chinese Academy of Sciences) Jie Ren (School of Earth and Space Sciences, Peking University)
IC 2023 Session 5 - AI for Edge computing Multi-Purpose Hall 2, 1M Floor, International Convention Center		
17:20-17:40	Edge-Cloud Co-Evolutionary Algorithms for Distributed Data-Driven Optimization Problems	Guo Xiaoqi、Chen Weineng、Wei Fengfeng Mao Wentao、Hu Xiaomin、Zhang Jun
17:40-18:00	Edge computing operating system: Seaway Edge	Li Feng
Bench 2023 Session 2： Paper Session Multi-Purpose Hall 4, 1M Floor, International Convention Center		
14:00-14:20	Automated HPC Workload Generation Combining Statistic Modeling and Autoregressive Analysis	Zechun Zhou (University of Science and Technology of China)
14:20-14:40	Edge AIBench 2.0: A scalable autonomous vehicle benchmark for IoT-Edge-Cloud systems	Wanling Gao（ICT, CAS）
Bench100 and CFA Session 1: Benchmark and Dataset Multi-Purpose Hall 4, 1M Floor, International Convention Center		
14:40-15:00	FAIR1M datasets	Zhiyuan Yan（ICT, AIR）
15:00-15:20	Specification for Reliability evaluation of swarm intelligent optimization algorithms	Weineng Chen （South China University of Technology）
15:20-15:40	Tea Break	
15:40-16:00	Juno workloads	Xiaofei Yan（The Institute of High Energy Physics of the Chinese Academy of Sciences）
16:00-16:20	Storage capacity & performance benchmark	Xiangnan Zhao （National Institute of Metrology of China）
16:20-16:40	iChallenge datasets	Huihui Fang（Sun Yat-sen University, South China University of Technology）
16:40-17:00	Hperf： Efficient Cross-platform Multiplexing of Hardware Performance Counters via Adaptive Grouping	Tongyu Liu（East China Normal University）
17:00-17:20	Governance and Sharing of high-quality scientific data in basic fields in China	Yuwei Gao（NBSDC）

Day 3, Tuesday, Dec. 5: Morning

Time	Event	Guests & Hosts
Open100 and CFA Session 4: High Performance Computing and Analysis Multi-Purpose Hall 1, 1M Floor, International Convention Center		
9:00-9:20	DeePMD: A deep learning package for many-body potential energy representation and molecular dynamics	Weile Jia（ICT, CAS）
9:20-9:40	ArchProbe: a profiling tool to demythify and quantify mobile GPU architectures	Ting Cao（Microsoft）
9:40-10:00	Asynchronous Memory Access Unit: Exploiting Massive Parallelism for Far Memory Access	Zhuolun Jiang（ICT, CAS）
10:00-10:20	PMIdioBench: Understanding the Idiosyncrasies of Real Persistent Memory	Xiaoyi Lu（The Ohio State University）
10:20-10:40	Tea Break	
Chip100 and CFA Session 3: Accelerator Multi-Purpose Hall 1, 1M Floor, International Convention Center		
10:40-11:00	Path Merging Based Betweenness Centrality Algorithm on GPU	Zhigao Zheng（Wuhan University）
11:00-11:20	Fully Homomorphic Acceleration Based on GPGPU	Mingzhe Zhang（IIE,CAS）
11:20-11:40	A 50KB Machine Learning GPU Stack	Liwei Guo（University of Electronic Science and Technology of China）
11:40-12:00	Complete Memory Aging Technology	Junsheng Lai（KINGTIGER TESTING）
IC 2023 Session 6 - AI for High Energy Physics, Materials Multi-Purpose Hall 4, 1M Floor, International Convention Center		
9:00-9:20	An Intelligent Image Segmentation Annotation Method Based on SAM Large Model	Jiameng Zhao (Zhengzhou University) Zhengde Zhang (Chinese Academy of Science) Fazhi Qi (Chinese Academy of Science)
9:20-9:40	ParticleNet for Jet Tagging in Particle Pyhsics on FPGA	Yutao Zhang (Zhengzhou University) Yaodong Cheng (Institute of High Energy Physics, Chinese Academy of Sciences)
9:40-10:00	Neutrino Reconstruction in TRIDENT Based on Graph Neural Network	Cen Mo (Shanghai Jiao Tong University) Fuyudi Zhang (Shanghai Jiao Tong University) Liang Li (Shanghai Jiao Tong University)
10:00-10:20	Application of Machine Learning-Based Neural Networks in Positron Annihilation Spectroscopy Data Analysis	Jiayi Xu (Institute of High Energy Physics, Chinese Academy of Sciences) Peng Kuang (Institute of High Energy Physics, Chinese Academy of Sciences) Fuyan Liu (Institute of High Energy Physics, Chinese Academy of Sciences) Xingzhong Cao (Institute of High Energy Physics, Chinese Academy of Sciences) Baoyi Wang (Institute of High Energy Physics, Chinese Academy of Sciences) Haiying Wang (China Univ Geosci Beijing, Sch Sci) Peng Zhang (Institute of High Energy Physics, Chinese Academy of Sciences)
10:20-10:40	Symmetry Preserving Attention Networks for resolved top quark and Higgs boson reconstruction at the LHC	Hideki Okawa (Institute of High Energy Physics, Chinese Academy of Sciences) Michael James Fenton (University of California, Irvine) Alexander Shmakov (University of California, Irvine) Yuji Li (Fudan University) Ko-Yang Hsiao (National Tsing Hua University) Shih-Chieh Hsu (University of Washington, Dept. of Physics) Daniel Whiteson (University of California, Irvine) Pierre Baldi (University of California, Irvine)
10:40-11:00	Quantum Tracking for Future Colliders	Hideki Okawa (Institute of High Energy Physics, Chinese Academy of Sciences)
11:00-11:20	The prospect of quantum machine learning algorithms in High Energy Physics	Abdualazem Fadol Mohammed (Institute of High Energy Physics)

Time	Event	Guests & Hosts
11:20-11:40	Application of Graph Neural Networks in Dark Photon Search with Visible Decays at Future Beam Dump Experiment	Zejia Lu (Shanghai Jiao Tong University) Xiang Chen (Shanghai Jiao Tong University) Jiahui Wu (Shanghai Jiao Tong University) Yulei Zhang (Shanghai Jiao Tong University) Liang Li (Shanghai Jiao Tong University)
IC 2023 Session 7 - AI for Algorithm, Security, and System Multi-Purpose Hall 2, 1M Floor, International Convention Center		
9:00-9:20	Machine Learning for time-to-event prediction and survival clustering: A review from statistics to deep neural networks	Jinyuan Luo (Guangzhou University) Linhai Xie (National Center for Protein Sciences (Beijing)) Hong Yang (Guangzhou University) Xiaoxia Yin (Guangzhou University) Yanchun Zhang (Guangzhou University)
9:20-9:40	Second-Order Gradient Loss Guided Single-Image Super-Resolution	Shuran Lin (Beijing Jiaotong University) Chunjie Zhang (Beijing Jiaotong University) Yanwu Yang (Huazhong University of Science and Technology)
9:40-10:00	Efficient and Scalable Kernel Matrix Approximations using Hierarchical Decomposition	Severin Reiz (Technical University of Munich) Keerthi Gaddameedi (Technical University of Munich) Tobias Neckel (Technical University of Munich) Hans-Joachim Bungartz (Technical University of Munich)
10:00-10:20	The implementation and optimization of FFT based on the MT-3000 chip SAR imaging	Guilan Li
10:20-10:40	EDFI: Endogenous Database Fault Injection with a Fine-Grained and Controllable Method	Haojia Huang (School of Data and Computer Science, Sun Yat-sen University) Pengfei Chen (School of Data and Computer Science, Sun Yat-sen University) Guangba Yu (School of Data and Computer Science, Sun Yat-sen University)
10:40-11:00	Artificial Intelligence Security Detection Platform	Zhou Shijie, Liu Qihe, Wu Chunjiang, Wu Zhewei, Zeng Yi, Qiu Shilin, Zhang Zhun, Zhou Ling, Liu Haoyu, Wang Junhan, Yu Ruilong, Gou Min, Liang Tao, Pan Haolan
11:00-11:20	Predicting activation energy of Li-containing compounds with graph neural network	Siqi Shi (School of Materials Science and Engineering, Shanghai University) Hailong Lin (School of Materials Science and Engineering, Shanghai University) Zhengwei Yang (School of Computer Engineering and Science, Shanghai University) Linhan Wu (School of Computer Engineering and Science, Shanghai University) Yue Liu (School of Computer Engineering and Science, Shanghai University)
11:20-11:40	Convolutional Graph Neural Networks for Predicting Enthalpy of Formation in Intermetallic Compounds Using Continuous Filter Convolutional Layers	Zongxiao Jin (Shanghai University of Engineering Science) Yu Su (Shanghai University of Engineering Science) Jun Li (Shanghai University of Engineering Science) Huiwen Yang (Shanghai University of Engineering Science) Jiale Li (Shanghai University of Engineering Science) Huaqing Fu (Shanghai Eraum Alloy Materials Co.,Ltd.) Zhouxiang Si (Shanghai Eraum Alloy Materials Co.,Ltd.) Xiaopei Liu (Shanghai Eraum Alloy Materials Co.,Ltd.)
Bench100 and CFA Session 2: Benchmark and Dataset Multi-Purpose Hall 5, 1M Floor, International Convention Center		
9:00- 9:20	MTEB: Massive Text Embedding Benchmark	Niklas Muennighoff（Hugging Face）
9:20- 9:40	Lauca: Generating Application-Oriented Synthetic Workloads	Zirui Hu、Siyang Weng（East China Normal University）
9:40-10:00	Evaluating Large Language Models	Yucong Duan（Hainan University）
10:00-10:20	MMRotate: A Rotated Object Detection Benchmark using PyTorch	Yue Zhou（Shanghai Jiao Tong University）

Time	Event	Guests & Hosts
10:20-10:40	Masked face recognition dataset and application	Baojin Huang（Wuhan University）
10:40-11:00	DPUBench: An application-driven scalable benchmark suite for comprehensive DPU evaluation	Chenxi Wang（UCAS）
11:00-11:20	PromptBench: Towards Evaluating the Robustness of Large Language Models on Adversarial Prompts	Jindong Wang、Kaijie Zhu（Microsoft）
11:20-11:40	OpenPerf： Infrastructure and application test and analysis framework	Fenglin Bi（East China Normal University）
11:40-12:00	OLxPBench: Real-time, Semantically Consistent, and Domain-specific are Essential in Benchmarking, Designing, and Implementing HTAP Systems	Guoxin Kang（ICT, CAS）
12:00-12:20	AIPerf: Automated Machine Learning as an AI-HPC Benchmark	Qi Zhang（Tsinghua University）

Day 3, Tuesday, Dec. 5: Afternoon

Chip100 and CFA Session 4: Design Method
Multi-Purpose Hall 1, 1M Floor, International Convention Center

14:00-14:20	SIMD co-processor	Zhongcheng Zhang（ICT, CAS）
14:20-14:40	TDGraph: Topology-driven Streaming Graph Processing Accelerator	Jin Zhao（Huazhong University of Science and Technology）
14:40-15:00	REMU:Enabling Cost-Effective Checkpointing and Deterministic Replay in FPGA-basedEmulation	Ke Zhang（ICT, CAS）
15:00-15:20	Warming Up a Cold Front-End with Ignite	David Schall（The University of Edinburgh）
15:20-15:40	Tea Break	

Open100 and CFA Session 5: Big Data and Platform
Multi-Purpose Hall 1, 1M Floor, International Convention Center

15:40-16:00	HVML: A new-style and easy-to-learn programming language	Yongming Wei（FMSoft）
16:00-16:20	gStore: a graph based RDF triple store	Lei Zou（Peking University）
16:20-16:40	PiFlow: an easy to use, powerful big data pipeline system	Xiaojie Zhu（Computer Network Information Center, Chinese Academy of Sciences）
16:40-17:00	BDOA and BDWare: Internet of Data Based on Digital Object Architecture and Big Data Interoperability Technology	Huaqian Cai（Peking University）
17:00-17:20	pyKT: A Python Library to Benchmark Deep Learning based Knowledge Tracing Models	Shuyan Huang（TAL Education Group）
17:20-17:40	Hypercrx: A browser extension for insights into GitHub projects and developers	Yenan Tang（X-Lab）
17:40-18:00	OpenLeaderboard: A Window to Open Source Dynamics	Fenglin Bi（East China Normal University）

IC 2023 Session 8 - AI applications 1
Multi-Purpose Hall 5, 1M Floor, International Convention Center

14:00-14:20	Hierarchical Masked 3D Diffusion Model for Video Outpainting	Fanda Fan
14:20-14:40	Express delivery order generation model based on deep learning	Wang Haifeng、Wu Tong、Yang Kun
14:40-15:00	Knowledge distillation	Hao Qinfen、Liu Jing
15:00-15:20	Spatiotemporal big data computing	Chen Zugang、Feng Hang、Cai Kuangsheng
15:20-15:40	Research on the construction method of earth observation knowledge hub based on knowledge graph	Chen Zugang

Time	Event	Guests & Hosts
IC 2023 Session 9 - AI applications 2 Multi-Purpose Hall 5, 1M Floor, International Convention Center		
15:40-16:00	Intelligent operation and maintenance management and control platform for urban municipal facilities	Fan Yiqun、Liu Fang、Gao Ying、Sun Shengting、Shao Changyu、Zhang Li
16:00-16:20	Cartoonist	Zhuang Lilin
16:20-16:40	ChatGPT for healthcare services: An emerging stage for an innovative perspective	Mohd Javaid
16:40-17:00	An era of ChatGPT as a significant futuristic support tool: A study on features, abilities, and challenges	Abid Haleem
17:00-17:20	Benchmarking, ethical alignment, and evaluation framework for conversational AI: Advancing responsible development of ChatGPT	Partha Pratim Ray
Bench 2023 Session 3：Paper Session Multi-Purpose Hall 2, 1M Floor, International Convention Center		
14:00-14:20	ERMDS: A obfuscation dataset for evaluating robustness of learning-based malware detection system	Lichen Jia（ICT, CAS）
14:20-14:40	Algorithmic fairness in social context	Wenjing Liu、Xiaoshuang Liang（Guangxi Normal University）
14:40-15:00	MetaverseBench: Instantiating and benchmarking metaverse challenges	Hainan Ye（UCAS）
15:00-15:20	HPC AI500 V3.0: A scalable HPC AI benchmarking framework	Chunjie Luo（ICT, CAS）
15:20-15:40	Tea Break	
15:40-16:00	SNNBench: End-to-end AI-oriented spiking neural network benchmarking	Fei Tang（UCAS）
16:00-16:20	IoTBench: A data centrical and configurable IoT benchmark suite	Simin Chen（Zhongguancun National Laboratory）
16:20-16:40	Hmem: A Holistic Memory Performance Metric for Cloud Computing	Yuyang Li、Ning Li（East China Normal University）
16:40-17:00	Quality at the Tail of Machine Learning Inference	Zhengxin Yang（ICT, CAS）
17:00-17:20	Enabling Reduced Simpoint Size Through LiveCache and Detail Warmu	Sang Wook Stephen Do（Futurewei Technologies）
Workshop：Information Superbahn Multi-Purpose Hall 4, 1M Floor, International Convention Center		
14:20-14:40	Serverless Computing for Computility Grid	Xiao Shi（Institute of Computing Technology, Chinese Academy of Sciences）
14:40-15:00	Efficient Resource Management System for Data Centers	Sa Wang（Institute of Computing Technology, Chinese Academy of Sciences）
15:00-15:20	Computility Measurement	Lei Wang（Institute of Computing Technology, Chinese Academy of Sciences）
15:20-15:40	Tea Break	
15:40-16:00	Preliminary Design and Application of Cross-Domain Distributed Experimental Platform	Yifan Wang（Institute of Computing Technology, Chinese Academy of Sciences）
16:00-16:20	Practical Design of Edge-Cloud Collaborative Computing Architecture	Xiaohui Peng（Institute of Computing Technology, Chinese Academy of Sciences）
Day 4, Wednesday, Dec. 6: Morning		
Technical Achievements Evaluation Roundtable Forum Multi-Purpose Hall 1, 1M Floor, International Convention Center		
9:00-10:00	Achievement Technology Evaluation Discussion	
10:00-11:00	Issue Certificate	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