MetaCom 2026

CONFERENCE PROGRAM

06–09 NOVEMBER 2026 | Xi'an, China

Preliminary schedule

PROGRAM AT A GLANCE

FRIDAY · NOVEMBER 6		ARRIVAL & WELCOME
14:00–18:00	Registration (Lobby)	
18:30–20:00	Welcome Reception (Chinese Restaurant)	

SATURDAY · NOVEMBER 7		PLENARY / TWO PARALLEL TRACKS
09:00–09:10	Opening Ceremony (Peon Hall)	
09:10–09:50	Keynote Talk 1 (Peon Hall)	
09:50–10:30	Keynote Talk 2 (Peon Hall)	
10:30–11:00	Coffee Break	
11:00–11:40	Keynote Talk 3 (Peon Hall)	
11:40–12:20	Keynote Talk 4 (Peon Hall)	
12:20–14:00	Break	
14:00–15:30	T1 · Immersive Media & XR (Lily Hall A)	W1 · Meta-XP Workshop (Lily Hall B)
15:30–16:00	Coffee Break	
16:00–17:30	T2 · Security & Trust (Lily Hall A)	W2 · MARC Workshop (Lily Hall B)
18:00–20:00	Banquet	

SUNDAY · NOVEMBER 8		SINGLE-TRACK TECHNICAL PROGRAM
09:00–10:00	T3 · AI & Digital Humans (Nanhu Hall)	
10:00–10:30	Coffee Break	
10:30–11:40	T4 · Communications & Edge AI (Nanhu Hall)	
11:40–13:00	Break	
13:00–13:55	T5 · Digital Twins & CPS (Nanhu Hall)	
13:55–14:20	Coffee Break	
14:20–15:10	T6 · Computing & Federated AI (Nanhu Hall)	

MONDAY · NOVEMBER 9		ACADEMIC VISITS
Time TBA	Campus Tour & Lab Visits	

14:00–15:30 | PARALLEL SESSIONS

Saturday · 7 November 2026

T1 Technical Session 1

14:00–15:30 | Lily Hall Venue A

Texture Enhancement and Repair for Digital Multimedia Broadcasting
Siamak Khatibi, Hans-Jürgen Zepernick, Muhammad Imran Iqbal, Thi My Chinh Chu, Yao Yong, Fatemeh Tavakoli, Momin Jamil, Rolf Esslinger and Trung Q. Duong

A Modular Low-Latency Pipeline for Remote Rendering in Metaverse Applications
Louay Bassbouss, Alexander Zoubarev, Stefan Pham, Stephan Steglich and Stefan Arbanowski

Immersive Exploration of Digital Wind Fields: An XR Framework for Progressive Visualization
Zheng Yang, Yuxin Shan, Zhengzheng Yan, Lei Xu and Rongliang Chen

Noise-Trained Transformer with Skeleton Embeddings for Efficient Avatar Joint Synchronization in the Metaverse
Yichao Zhang and Qichao Xu

XRheart: High-Performance Electrophysiology Simulation and XR Visualization of Ventricular Arrhythmia in Human Heart
Yehua Yang, Tianhao Ma, Jing-Yuan Wang, Yujie Gong, Fenfen Qi, Xinhong Wang, Li Luo, Yi Jiang, Rongliang Chen and Xiao-Chuan Cai

W1 Meta-XP 2026

14:00–15:30 | Lily Hall Venue B

Destination-Guided Pedestrian Trajectory Prediction for Digital Twin Synchronization
Jin-Woo Kim, Min-Su Kim and Hyun-Suk Lee

Covariance-Manifold Completion of Missing Channels for Robust Surface-EMG Gesture Decoding
Cheolsoo Park, Hyeonjung Kim, Jihwan Won and Sunwoo Yeon

Joint Search of IMU Sensor Placement and Neural Architecture for Human Activity Recognition
Mukang Kim, Sejung Kim and Jaeho Kim

Region-Grounded Event Memory for Spatial Context-aware VideoQA
Taeram Ryu, Sejung Kim and Jaeho Kim

Reverse Synthesis Grounded in Constraints and State for IoT Large Action Models
Bowon Kwon, Kyeonghwan Nam, Jaehyung Jeong and Jaeseung Song

An LLM-Driven Framework for Generating Multi-Protocol Interworking Proxies with Independent Verification in IoT Service Layers
Jayeon Pyo, Hyungyun Cho and Jaeseung Song

Design and Comparative Evaluation of Authorization Profiles for MCP-oneM2M Interworking
Jaehyung Jeong, Jiho Lee and Jaeseung Song

Can a Distilled Dataset Validate Its Own Source? Label-Error Detection via Dataset Distillation
Yejin Oh, Jayeon Pyo and Jaeseung Song

16:00–17:30 | PARALLEL SESSIONS

Saturday · 7 November 2026

T2 Technical Session 2

16:00–17:30 | Lily Hall Venue A

Fingerprinting Minecraft Users via Gameplay Behavior Analysis
Krishno Dey, Diogo Barradas and Saqib Hakak

Adaptive Sliding-Window Dynamic Feature Selection for Real-Time Intrusion Detection in Metaverse-Enabling Cloud Infrastructure
Seth Asafo

"Was That Real?" Understanding How Users Interpret Anomalous Spatial Audio in Virtual Reality
Kousei Otsuka, Shodai Kurasaki, Mayu Fujita and Akira Kanaoka

A Game Theoretical Defense Framework Against GNSS Spoofing in UAV Swarms
Fan Zhang, Xiaoliang Wang, Ruobin Ju, Jiamin Tian, Wenyu Zhang and Ke Zhao

VeriDAG-FL: Zero-Knowledge Verifiable Federated Learning over a DAG-Based Blockchain for Trustworthy Metaverse Digital Twins
Fenhua Bai, Ranran Li, Kai Zeng, Chunlin Zhou and Tao Shen

W2 MARC 2026

16:00–17:30 | Lily Hall Venue B

Language-Guided Object Retrieval via Multi-Camera Grounding and Sensor-Driven Navigation
Yeoncheol Kim, Eunseo Kim, Eunjae Jang, Minsoo Oh and Hyobin Park

Relation-Aware Visual Grounding and Geometric Localization for MARC 2026
Taejeong Park, Taeyoung Lee, Ijun Jo, Juwon Park and Eunchae Park

Relation-Grounded 3D Localization from Multiple CCTV in a Digital Twin: Target–Anchor Selection and Role-Aware Geometric Projection
Siwoo Park, Jayeon Pyo, Yejin Oh, Minseok Kim and Jaeseung Song

A Deadline-Aware Hybrid Vision–Language–Action System with Dynamic Perception Scheduling
Yoongeun Ko and Junghwan Lee

Offline Multi-Camera Perception and Localization for Language-Conditioned Targets
Muhammad Ahmad Nadeem, Luka Turmanidze, Habibul Bashar, Bhawish Kumar, Martin M. T. Choy and Kam Kong Cheng

09:00–11:40 | TECHNICAL SESSIONS

Sunday · 8 November 2026

T3 Technical Session 3

09:00–10:00 | Nanhu Hall

Diffusion-Guided Personalized Rendering in Multi-User Metaverse: A Game-Theoretic Approach
Yuntao Wang, Qichao Xu, Qinnan Hu, Shaolong Guo, Minghui Dai and Linkang Du

MDESIC: Stereo Image Compression with Attention and Monocular Depth Estimation
Haihang Sun, Biao Li, Shuai Zhang and Yankai Yin

Policy Manager: Pre-Retrieval Resource Allocation for Long-Term Emotional-Support Digital Humans
Zhi Chen, Ruidong Li and Hao Gong

A User-Triggered UAV Dispatching System for Precise and Fast Mountain Search Missions (WS-TNI)
Mingyang Wang, Yi Hong, Tungchak Lee, Ashwin Sundar and Yalin Liu

A Dynamic Prompt Engineering Framework for Multi-dimensional English Essay Assessment Based on Large Language Models (WS-TNI)
Zhongyu Yao, Karen Yau, Yu Yang, Yinfeng Cao, Di Wu, Enji Hu, Yi Wang, Ka-Chun Wong and Lingjie Li

T4 Technical Session 4

10:30–11:40 | Nanhu Hall

An Inverse Distortion Recovery Method for Dynamic Entangled-Photon Ranging
Wei He, Dongnan Zhou, Yong Wang, Mu Zhou, Pingrong Zhang, Xu Zhou and Xiong Wang

Task Allocation for Cooperative Underwater Sensing With Autonomous Underwater Vehicles
Zheng Hu and Qichao Xu

Event-Driven Semantic-Aware Resource Allocation for Metaverse-Assisted Disaster Response
Mingqing Zheng and Qichao Xu

A Capability-Aware Task Cooperation Scheme for Embodied AI Robots with Edge LLM Inference
Xiaolin Niu, Yuntao Wang, Zhou Su, Shaolong Guo, Yanghe Pan and Linkang Du

13:00–15:10 | TECHNICAL SESSIONS

Sunday · 8 November 2026

T5 Technical Session 5

13:00–13:55 | Nanhu Hall

Task-Aware Pruned Semantic Model Distribution for UAVs in Cyber IoT Systems
Zixuan Wan and Qichao Xu

An Interactive Digital-Physical Twin System for Mobile Robot Remote Operation and Incremental Scene Updating
Souta Miyauchi, Ruidong Li and Hao Gong

GP-02: A Sub-50 g Head-Mounted RTK-GNSS/IMU/Barometer Pose Estimator with On-Board GNSS-Denied Recovery
Alex Orsholits and Manabu Tsukada

ConfigHDT: A Knowledge-Driven System for Health Digital Twin Data Requirements and Readiness
Huanmei Wu, Allen Zhao and Jenny Zhao

T6 Technical Session 6

14:20–15:10 | Nanhu Hall

Optimizing Scheduling and Resource Allocation in High-Performance Computing: Case Study on IKARUS Infrastructure
Tahani Hussain, Alaa Ismail and Jasem Alshukry

Adaptive Push–Pull Queries in Mini-Datacenters for Metaverse Applications
Sami Habib and Paulvanna Nayaki Marimuthu

Standardized and Interoperable Federated Learning for the Metaverse: Bridging oneM2M and ETSI MEC
Marco Picone, Jaeseung Song, Andreas Kraft, Bob Flynn, Peter Niblett, Fabio Turazza, Marco Mamei, Eunjin Lee, Kaleb Gebremeskel and Samir Medjiah

GridCheb: Spectral Graph Convolution with Spatial Attention for Edge-Level Link Prediction in Power Transmission Networks
Lianchao Su, Ke Zhao, Fan Zhang, Xiaoliang Wang and Tingting Xu