2026 Global Information Infrastructure and Networking Symposium (GIIS 2026)

Nanjing, China
22-24 April 2026

IEEE Catalog Number: CFP2665C-POD
ISBN: 979-8-3315-4755-4

IEEE
Advancing Technology for Humanity

Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP2665C-POD
ISBN (Print-On-Demand):	979-8-3315-4755-4
ISBN (Online):	979-8-3315-4754-7
ISSN:	2150-3281

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

CURRAN ASSOCIATES INC. proceedings .com

TABLE OF CONTENTS

MEC-Enabled Integrated Terrestrial and Non-Terrestrial Networks: A Focused Overview 1
Insaf Rzig, Wael Jaafar, Safwan Alfattani

Reconstructing Occluded Power Lines from LiDAR Data: Current State, Methods, and Future Research 8
Eya Ben Kacem, Wael Jaafar, Rami Langar

On the Optimization of Multi-UAV Task Offloading in Vehicular Networks 15
Mehmet Alp Demircioğlu, Anıl Budak, Melda Yuksel, Wael Jaafar

Network Temperature Driven Equilibrium Optimization for Enhanced Intrusion Detection 21
Yaxuan Chen, Qiang Sun, Changda Wang

Early Detection and Active Defense Method for Ransomware in Smart Grids 28
Guangyuan Zhong, Mohan Li, Ruihua Zhang, Yanbin Sun, Xiaojiang Du

Facility-Location-based Model Partitioning for Efficient Inference in Edge Intelligence 35
Wenyun Ma, Chenshan Ren, Chunhui Ai

Online Uplink Scheduling for Multi-User LEO Satellite IoT Networks 42
Song Yang, Mengjun Hu, Yongzhen Wang, Buyu Wang, Jingwei Qi, Bo Zhao

Towards Standardized Routing for LEO Satellite Networks: A Comparative Study 48
Lin Han

An Empirical Evaluation of Lightweight Transformer Models for Joint Entity-Relation Extraction in Cybersecurity 55
Yue Wue, Lin Ye, Hongli Zhang, Runze Xie, Wanzong Peng

JUMP: Joint Preloading and Multi-Path Transmission for Short Video Streaming 62
Jin Ye, Boshi Xu, Lijun Qin

Quantum Machine Learning for Anomaly Detection in 5G and Beyond Mobile Networks 68
Fahdah Alalyan, Jihene Saidi, Wael Jaafar, Rami Langar

Network Configuration Intent Parsing Equipped with a DeBERTa-Based Joint Model 74
Jiawen Duan, Yongqiang Dong, Pengwei Zhang

Trust-Driven Adaptive Sampling for Grid-Based IoT Path Validation 80
Runyuan Yan, Qinbao Xu, Changda Wang

Deployment-Oriented Model Optimization for real-time 3D Hand Reconstruction in 5G Edge AI Virtual Try-On 87
Hamza Kchok, Hachem Souiher, Ilhem Fajjari, Nadjib Aitsaadi

OrbitServe: Joint Energy and Latency Optimization for On-Orbit Vision-Language Model Inference 94
Gege Shen, Shuai Yu, Xu Chen, Yaochen Yu, Donghai Tian

Network Coding Assisted In-Network Caching Implementation for Multi-Hop IoT Networks 100
Isikcan Yilmaz, Jonas Schulz, Juan A. Cabrera, Patrick Seeling, Frank H. P. Fitzek

5G RedCap Devices Driving the Evolution of Cellular IoT: A Review 105
Saeed Alsabbagh, Amine Adouane, Pengwenlong Gu, Nadjib Aitsaadi, Cedric Adjih

KPI2KVI: A Multi Agent Workflow for Calculating Key Value Indicators from Service Descriptions 112
Masoud Shokrnezhad, Tarik Taleb, Yan Chen, Qize Guo

Kube-SFC: Scalable and Resilient Cloud-Native Service Function Chaining with Hardware Acceleration 118
Yan Zhang, Xian Yu, Zihao Zheng, Yansong Yin, Tianyun Zhang

PrivSpeech: A Declarative Framework for Privacy-Preserving Speech Analytics 122
Ruichao Zhong, Shutong Chen