Special Session 2

Distributed Large Language Model Training/Inference Systems over Edge Networks

2026 IEEE 9th World Conference on Computing and Communication Technologies (WCCCT) will be held in Qingdao, China during April 10-12, 2026, sponsored by Ocean University of China, co-sponsored by IEEE Qingdao AP/MTT/COM Joint Chapter. Patrons are Qingdao University of Technology, Shandong Normal University, Shenzhen University, Sichuan Normal University, Xihua University, Warsaw University of Technology, Guangzhou Institute of Science and Technology, Gannan Normal University, University of Haute Alsace, Okayama University, Qinghai Institute of Technology, and Key Laboratory of Wireless Sensor Network in University of Sichuan Province, Sichuan Normal University.

The deployment and training of Large Language Models (LLMs) over edge networks introduce substantial challenges, including constrained resources, heterogeneous infrastructures, and stringent latency constraints. This Special Session solicits research contributions on distributed systems and optimization techniques for resource-efficient LLM inference and convergence-aware LLM training in edge computing environments. Two core technical thrusts include:

- (1) Inference deployment resource optimization, encompassing expert selection and placement, token-aware routing, memory- and bandwidthconstrained scheduling, KV-cache management, and SLO-compliant serving strategies across distributed edge nodes;
- (2) Training convergence optimization, including communication-efficient gradient synchronization, sparsity-aware update mechanisms, adaptive parallelism strategies (e.g., MoE), and convergence acceleration under limited communication bandwidth.

Topics of interest include but are not limited to:

- Joint computation–communication–energy co-optimization;
- Model partitioning and orchestration across edge-cloud hierarchies;
- Federated or hierarchical training with provable convergence guarantees;
- System frameworks for scalable, low-latency LLM inference.

The session welcomes both theoretical results and system-level designs, particularly those validated on realistic edge platforms or standardized LLM benchmarks.

Please choose Special Session 2 to submit. Submission Link: https://www.zmeeting.org/submission/wccct2026

More details about special session 2, Please view: https://wcct.org/ss_2.html

Publication

Submitted manuscripts will be peer reviewed by the conference scientific committees. Accepted and presented papers will be included in Conference Proceedings.

Publication History

WCCCT2025 | ISBN: 979-8-3315-1261-3 | IEEE Xplore | Ei Compendex and Scopus WCCCT2024 | ISBN: 979-8-3503-7231-1 | IEEE Xplore | Ei Compendex and Scopus WCCCT2023 | ISBN: 978-1-6654-6145-0 | IEEE Xplore | Ei Compendex and Scopus WCCCT2021 | ISBN: 978-0-7381-4498-6 | IEEE Xplore | Ei Compendex and Scopus WCCCT2020 | ISBN: 978-1-7281-9737-1 | IEEE Xplore | Ei Compendex and Scopus

Special Session 2 Chair



Assoc. Prof. Danyang Zheng Southwest Jiaotong University, China

Research Areas: Services Computing, AI on Network, Network Reliability, and Network Security

Co-Chairs



Assoc. Prof. Chengzong Peng **Chengdu University of Information** Technology, China

Research Areas: Network Function Virtualization, Network Security



Assoc. Prof. Shaohua Cao University of Petroleum (East China), China

Research Areas: Edge Intelligence, Federated and Distributed Learning



Asst. Prof. Chen Yang Southwest Jiaotong University, China

Research Areas: Services Computing, Edge Intelligence, Federated Learning

Awards



Best Paper Awards **Excellent Oral Presentation Excellent Poster Presentation**

Conference Srcretary: Ms. Lucy Zhou Email: wcct_conf@outlook.com

Sponsor

Co-Sponsor























