



ICDAM-2026

7th International Conference on Data Analysis and Management

*Organized by London Metropolitan University, London, UK (Venue Partner)
in association with*

WSG University, Bydgoszcz, Poland, Europe

&

Portalegre Polytechnic University, Portugal, Europe

&

BPIT, GGSIPU, Delhi

Date: 12th – 14th June 2026

******* CALL FOR PAPERS *******

SPECIAL SESSION ON

Deep Learning and Federated Analytics-based Next Generation Smart Transportation Systems

SESSION ORGANIZERS:

Dr. Nilesh Kumar Jadav
Associate Professor,
Marwadi University, Rajkot, India
nilesh.jadav@marwadieducation.edu.in
Tel: +918866711305

Dr. Madhu Shukla
Professor & Head (CSE-AI),
Marwadi University, Rajkot, India
madhu.shukla@marwadieducation.edu.in
Tel: +91 9998191173

Dr. Kirtirajsinh Zala
Associate Professor,
Marwadi University, Rajkot, India
kirtirajsinh.zala@marwadieducation.edu.in
Tel: +91 9898980047

Dr. Surbhi Bhatia Khan
AI Researcher,
University of Salford, Manchester, UK
S.Khan138@salford.ac.uk
Tel: +447951361531

Mr. Vipul Ladva
Assistant Professor,
Marwadi University, Rajkot, India
vipul.ladva@marwadieducation.edu.in
Tel: +91 9978278728

EDITORIAL BOARD: (Optional):

[Name, University or Organization, Country, e-mail]

SESSION DESCRIPTION:

In recent years, the Internet of Things (IoT) and Artificial Intelligence (AI) have transformed transportation into smart transportation systems (STSs) by enhancing their mobility, driving comfort, and safety. However, with the rapid urbanization, increasing population, and severe concerns about climate change, STSs demand innovative and sustainable solutions to cope with challenges, such as data privacy and cybersecurity, interoperability, data management, and infrastructure bottlenecks (e.g., self-driving cars). To respond to the aforementioned challenges, the research community and industrialists are discovering new avenues of novel methodologies using modern AI, such as advanced deep learning, federated learning, Large Language Models (LLMs), and TinyML to re-transform STSs into next-generation STSs. As a future trend, there is an imperative need to explore opportunities for optimizing the operational efficiency of next-generation STSs with multi-source transportation big data.

In this special session, we invite researchers and academicians to submit their novel AI-driven approaches for next-generation STSs. The main purpose of this special session is to improve collaboration with researchers and enthusiasts working under the umbrella of intelligent transportation systems. Through this special session, we seek cutting-edge technologies, such as deep learning, federated learning, distributed computing, reinforcement learning, and affective computing to alleviate challenges of next-generation STSs, such as blind spot detection, driver's drowsiness detection and its psychology, adaptive warning system, night-time object detection, and many more. Researchers from various backgrounds, such as mathematics, computer science, electrical engineering, transportation engineering, and AI can come together to discuss emerging models, proofs, optimization techniques, safety guarantees, and computational frameworks that support the future of intelligent mobility.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- AI-Driven Solutions for Blind-Spot and Occlusion Challenges in Smart Transportation.
- Next-Generation Driver Drowsiness and Psychological State Monitoring Systems.
- Federated Learning and Privacy-Preserving Data Sharing in Next Generation STSs.
- Modern AI for large-scale city-wide traffic state estimation and prediction.
- Federated Learning for Personalized Driving Behaviour and Traffic Adaptation
- Next-Generation Traffic Management and Smart Urban Mobility
- Federated Learning and Edge AI for On-Device Autonomous Driving Updates
- End-to-End Deep Learning Architectures for Autonomous Driving
- Deep Learning for Real-Time Traffic Prediction and Optimization
- Mathematical Foundations of Deep Learning for Next Generation STSs.
- Discrete Mathematics for Routing, Scheduling, and Transportation Planning

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **Deep Learning and Federated Analytics-based Next Generation Smart Transportation Systems on or before 12-14 June 2025**]. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at <https://icdam-conf.com/downloads> . All submitted papers will be reviewed on a double-blind, peer-review basis.

NOTE: While submitting a paper in this special session, please specify **Deep Learning and Federated Analytics-based Next Generation Smart Transportation Systems** at the top (above paper title) of the first page of your paper.

* * * * *