IEEE INFOCOM 2027 | Workshop

# Fusion of Data, Operation, Information, and Communication Technologies for Industrial Internet and Society 5.0

## The 2nd DOICT-IndSoc Workshop | Call for Papers

## May 24, 2027 | Honolulu, Hawaii, USA



The Second International Workshop on Fusion of Data, Operation, Information, and Communication Technologies for Industrial Internet and Society 5.0 (DOICT-IndSoc 2027) will be held in conjunction with IEEE INFOCOM 2027. The workshop focuses on AI and communications, blockchain, digital twins, autonomous driving, industrial control, human-machine collaboration, and related topics.

IEEE INFOCOM is a CCF A / CORE A* conference in computer networking and communications. Building on the first workshop, which attracted submissions from 20 countries and regions, DOICT-IndSoc 2027 will continue to promote interdisciplinary exchange and academia-industry collaboration, exploring new technologies, architectures, and applications for Industrial Internet and Society 5.0.

## Topics of Interest

- Architectures for DOICT fusion in Industrial Internet
- Communication networks for industrial automation and cyber-physical systems
- Service-based architectures and sustainable technologies for Industrial Internet
- Cross-domain and multi-resource management for industrial applications
- Edge intelligence and information security for Industrial Internet
- Network support for Human-AI Agents-device collaboration and cooperative autonomy
- Blockchain-based trust, supply chain, and decentralized identity management
- Related autonomous driving technologies in Intelligent Transportation System
- Connected robots/devices/vehicles, and industrial IoT platforms
- Payment channel networks and incentive design for multi-party collaboration
- Software and data compliance and assurance in Industrial Internet
- Time-series forecasting for operation and maintenance in Industrial Internet
- AI model verification and interpretability for industrial intelligence
- AI model privacy and data confidentiality protection in industrial environments
- Digital twin-driven resource management and task scheduling in smart manufacturing
- Human-AI Agents-device collaboration and cooperative autonomy
- AR/VR applications and related technologies in Industrial Internet and Society 5.0

## SUBMISSION GUIDELINES

Papers must use the standard IEEE two-column format and must not exceed **six pages, including references**. All submissions will undergo peer review. Accepted papers presented by an author at the workshop will be published in the IEEE INFOCOM 2027 proceedings and IEEE Xplore.

## IMPORTANT DATES

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| Submission deadline | **Dec. 29, 2026** |
| Acceptance notification | **Feb. 2, 2027** |
| Camera-ready deadline | **Feb. 16, 2027** |
| Workshop date | **May 24, 2027** |

## Organizing Committee

### Steering Committee

Hiroshi Esaki, The University of Tokyo, Japan
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Workshop website: https://indsocws-pixel.github.io/doict-indsoc/

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