DDL2023

Decentralized Deep Learning: New Trends and Advanced Technologies

March 15-17, 2023 Mexico City, Mexico

This workshop will be held in conjunction with the 15th IEEE International Symposium on Autonomous Decentralized Systems (ISADS 2023. https://www.isads2023.org)

General Co-Chair
Khaled R. Ahmed, Southern Illinois University, USA
Aboul Ella Hassanien, Cairo University, Egypt

Program Committee Co-Chairs
Tarek Helmy, KFUPM, Saudi Arabia

Program Committee
Banafsheh Rekabdar, Portland State University, USA
Shahram Rahimi, Mississippi State University, USA
Ghada Omar, Southern Illinois University, USA
Moawia Eldow, University of North Texas, USA
Henry Hexmoor, Southern Illinois University, USA

Important Dates:

Paper submission due:
October 31, 2022
Author notification:
December 16, 2022
Final manuscript due:
January 13, 2023

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Scope:

Deep learning, big data, IoT and blockchain are very dynamic, grooming and important research topics of today's technology. They are contributing to the progress towards wide applications. Recently, new state-of-the-art data management and decentralized deep learning approaches became of great interest in both academic research and industrial applications.

The main aim of this workshop is to encourage recent studies of deep learning, reinforcement learning, decentralized deep learning, and federated learning for intelligent automation applications. It is expected that the research submitted to this workshop will answer the following question: How big data, IoT, blockchain, and deep learning should be used to build decentralized and intelligent automated applications to achieve safety, security and optimize performance and economy?

Topics of interest for this workshop include, but are not limited to:

- Deep Learning and Reinforcement learning
- Decentralized Federated Learning
- Deep learning models for safety
- Deep learning models for Vision, Image Processing, and Environment Perception
- Security for IoT-driven intelligence and incorporate deep learning models
- Intelligent Automation: IoT, Big data, and Cyber-physical systems
- IoT-driven intelligence and incorporate deep learning models
- IoT platform based on Blockchain or/and deep learning
- Big data and autonomous vehicles
- Cyber-physical systems
- Cybersecurity novel applications
- Infrastructure and Platform for Big Data and Intelligent systems
- Deep Learning in Security and Blockchain
- Blockchain foundations, new design, and privacy
- Security and data integrity with blockchain
- Cyberattacks on blockchains
- Blockchain and Machine Learning/Artificial Intelligence
- Deep Learning Solutions Against Recent Cyber Threats
- Privacy-preserving applications using deep learning models
- Intrusion detection by Deep Learning
- Cyber-Physical Surveillance systems based on deep learning
- Cyberthreat intelligence and classification
- Secure deep learning algorithms
- Deep learning Cybersecurity novel applications
- Cybersecurity and Machine Learning/Artificial Intelligence
- Secure online inferencing

Information for Authors:

Prospective authors are invited to submit full papers (IEEE double-column conference paper format, 6 pages) to describe original work (not submitted or published elsewhere). Authors are also invited to submit digest papers (IEEE double-column conference paper format, 2-4 pages) to showcase results recently obtained in industry or academia. All accepted papers will be presented at the conference and published in the ISADS 2023 Proceedings. At least one of the authors of each accepted paper must register and present the paper at ISADS 2023. Authors must submit their manuscripts electronically to: https://easychair.org/conferences/?conf=isads2023 . Make sure that you select DDL 2023 track for your submission.

Workshop page: DDL2023