







The Global AI Summit 2024 **International Conference on Artificial Intelligence and Emerging Technology** 4th – 6th September 2024

Call for Papers (CFP)

Special Session on "Emerging Technologies and Artificial Intelligence for Secure **IoT-enabled Computer Vision Applications**"

In contemporary years, the convergence of Artificial Intelligence (AI) and Emerging Technologies such as Blockchain, Artificial Intelligence (AI), Digital Twin (DT), and the Internet of Things (IoT) has catalyzed rapid advancements across various advanced applications. One promising application area is Computer Vision (CV), where AI-powered systems investigate visual data from IoTenabled sensor devices to extract beneficial insights. However, as these technologies proliferate, ensuring the security and privacy of IoTenabled Computer Vision Applications becomes essential. One of the primary objectives of this special session is to explore innovative solutions and strategies to ensure the security, privacy, and trustworthiness of Computer Vision Approaches (CVA) deployed in IoT Network Environments. Moreover, incorporating IoT-enabled Computer Vision Applications security measures within these technologies, including Blockchain, Federated Learning (FL), Digital Twin (DT), Artificial Intelligence (AI), and others, is imperative to safeguard sensitive vision data, maintain privacy preservation, and mitigate cybersecurity threats and facilitate the development of robust, trustworthy, and privacy-preserving computer vision applications. The motivation behind a special issue on "Emerging Technologies and Artificial Intelligence for Secure IoT-enabled Computer Vision Applications" derives from the urgent need to explore and comprehend the multifaceted implications of these cutting-edge innovations. With IoT sensor devices permeating various aspects of Computer Vision, from wearable IoT networks, the potential attack surface for cyber threats expands exponentially. By delving into this realm, we strive to foster a deeper acquaintance of how emerging technologies such as Artificial Intelligence (AI), Blockchain, and Advanced Encryption Algorithms (AEA) can be addressed to create secure, efficient, and IoT-enabled Computer Vision Applications paradigms. Therefore, this special session explores innovative solutions, advanced technologies, and best practices to fortify Secure IoT-enabled Computer Vision Applications (SICVA).

This special session explores the latest advancements in Emerging Technologies and Artificial Intelligence for Secure IoT-enabled Computer Vision Applications (SICVA). SI's main objective is to serve as a comprehensive resource for researchers, practitioners, and policymakers striving to navigate the complex landscape of Secure IoT-enabled Computer Vision Applications. By combining cuttingedge research and practical insights, we seek to advance knowledge and promote the adoption of secure and resilient IoT technologies that prioritize vision well-being and data integrity. This special session explores the intersection of AI, emerging technologies, and IoT-enabled Computer Vision Applications (SICVA), explicitly focusing on security and privacy challenges and solutions.

Topics of interest include, but are not limited to, the following:

- Machine Learning and AI for Secure IoT-enabled Computer Vision Applications
- Privacy-preserving Sharing Mechanisms for IoT-enabled Computer Vision Applications
- Threat Analysis in IoT-enabled Computer Vision Applications
- Cybersecurity Measures for IoT-enabled Computer Vision Applications
- Edge Computing Security for IoT-enabled Computer Vision Applications
- Blockchain-based Secure Scheme for IoT-enabled Computer Vision Applications
- Digital Twin-based Virtual Environment for IoT-enabled Computer Vision Application
- Secure communication protocols for IoT devices transmitting visual data.

Manuscript Submission Process: Open your Microsoft CMT Account Login, choose the AISUMMIT2024 conference, select the Session "Emerging Technologies and Artificial Intelligence for Secure IoT-enabled Computer Vision Applications (SICVA)", and submit the manuscript or choose the following link for the submission manuscript https://cmt3.research.microsoft.com/AISUMMIT2024/Track/17/Submission/Create

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Kev Dates

Abstract Submission Deadline: June 25, 2024 Full paper submission: June 30, 2024 Notification of Paper Acceptance: July 31, 2024 Final Paper Submission: August 15, 2024 Conference: September 04-06, 2024

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