
CALL FOR PAPERS

Special Session on “Advanced Techniques in Image Processing and Data Security: Exploring Neural Networks, Mixed Reality, and Steganography”

2024 6th International Conference on Image, Video and Signal Processing (IVSP 2024)
March 14-16, 2024, Meiji University Ikuta campus, Kawasaki, Japan

ORGANIZED AND CHAIRED by

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SPECIAL SESSION DESCRIPTION (no more than 150 words)

This special session aims to explore the convergence of image processing and data security, highlighting novel approaches and practical applications. The session includes a series of presentations based on pioneering research papers. Key topics include advanced image interpolation techniques utilizing the flexibility of multilayer perceptron neural networks, offering new dimensions in image enhancement. Additionally, the session features an intriguing study on the use of mixed reality smart glasses for immersive cultural learning, with a case study on Kavalan traditional culture, showcasing how cutting-edge technology can facilitate deeper cultural understanding and engagement.

Another focal point is the enhancement of data embedding capacity in encrypted images, where adaptive MSB prediction methods are used to improve security and efficiency. Furthermore, reversible data hiding techniques in encrypted point clouds are discussed, employing innovative strategies like virtual points and multi-MSB prediction for heightened data protection. The session concludes with insights into joint steganography and encryption techniques using deep learning models, marking a significant advancement in secure data transmission. This session is ideal for professionals and researchers interested in the latest developments in image processing, data security, and the application of mixed reality in cultural education.

TOPICS COVERED (no more than 5)

1. **Neural Network-Based Image Interpolation**
2. **Mixed Reality in Cultural Learning: Kavalan Study**
3. **Advances in Data Embedding with Adaptive MSB**
4. **Secure Data Hiding in Point Clouds**
5. **Deep Learning for Steganography and Encryption**

Schedule:

Deadline for submission of the paper (s) to the Zmeeting system submission site by selecting the desired special session- November 20, 2023

Notification of acceptance –December 20, 2023

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