

**The 20th International Conference on  
Intelligent Information Hiding and Multimedia Signal Processing  
(IIHMSP-2024)**

October 4-6, 2024, Matsue, Japan

**Call for Papers**

**Special Session on**

*Breaking Barriers: The Intersection of AI, Multimedia Signals, and Digital Twins in Life and Information Sciences*

**Organizers:** Prof. Thi Thi Zin, Prof. Hiromitsu Hama, and Dr. Cho Nilar Phyo

In the dynamic landscape of digital transformation (DX), the confluence of artificial intelligence (AI), multimedia signals, and Digital Twins presents profound opportunities within human life and information sciences. This session delves into the transformative synergy among AI, multimedia signals, and Digital Twins, catalyzing advancements in life and information sciences. By harmonizing these domains, this session harnesses AI's prowess in data analysis and pattern recognition in tandem with Digital Twins' virtual replicas of real-world systems, fostering enriched understanding, predictive capabilities, and intervention strategies in healthcare, biotechnology, and allied fields. Facilitating interdisciplinary collaboration, this session serves as a platform for researchers, entrepreneurs, academicians, and students to showcase their research outcomes and engage in robust knowledge exchange.

Submissions of high-quality papers describing mature results or on-going work are invited.

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

1. Image Processing Techniques in the Digital Age and its synergy with digital twins
2. Digital Twins in Healthcare: Enhancing Diagnosis, Treatment, and Patient Care
3. AI's Role in Information Science Advancements
4. Applications of Image Processing in Various Domains
5. Information Retrieval and Analysis Leveraging AI and Digital Twins
6. Multimedia Monitoring for Behavioral Patterns in Livestock
7. Visual Monitoring Systems for Human Activities and Behaviors
8. Utilization of Digital Twins Technologies in Medical and Dairy Sciences
9. Integration of Deep Learning and Machine Learning in Image and Signal Processing
10. Harnessing Big Data and Data Science for Insightful Analyses

**Submissions:**

Papers should follow the template announced on the IIHMSP-2024 conference website and be submitted via email to session organizer Prof. Thi Thi Zin at [thithi@cc.miyazaki-u.ac.jp](mailto:thithi@cc.miyazaki-u.ac.jp).

**Conference Proceeding Information:**

Papers that are presented orally at the conference and meet the publication requirements of IIHMSP-2024 conference proceedings will be published in Springer's book series titled "Smart Innovation, Systems and Technology". Normally, this series will be indexed by Scopus and EI Compendex.

**Important Dates:** (If IIHMSP-2024 extends the dates, follow those dates announced on the website)

Paper submission deadline: **June 15, 2024**

Acceptance notification: **June 30, 2024**

Camera-ready copy and registration: **July 15, 2024**

**For more information:**

Please visit the IIHMSP-2024 official websites <https://iihmosp24.github.io/> or contact the organizers of this invited session:

Dr. Thi Thi Zin

Professor, Graduate School of Engineering

University of Miyazaki, Miyazaki, Japan

Email: thithi@cc.miyazaki-u.ac.jp

Dr. Hiromitsu Hama

Honorable Professor, Osaka City University, Japan

E-mail: hama.hiromitsu@gmail.com

Dr. Cho Nilar Phyo

Assistant Professor, Graduate School of Engineering

University of Miyazaki, Miyazaki, Japan

E-mail: chonilar@cc.miyazaki-u.ac.jp