# The 21st International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIHMSP 2025)

October 15-17, 2025, The Splendor Hotel, Taichung, Taiwan

# Special Session on Metaheuristic Algorithms and Applications

## Call for Papers

Organizers: Prof. Shu-Chuan Chu, Prof. Hao Luo, and Dr. Pei Hu

The Special Session focuses on the application of metaheuristic algorithms in image processing, signal processing, and various engineering problems. Metaheuristic algorithms, including Genetic Algorithms (GA), Particle Swarm Optimization (PSO), and Ant Colony Optimization (ACO), have demonstrated their effectiveness in solving complex optimization problems prevalent in these fields. This session aims to explore how these algorithms can be utilized to address challenges in image and signal processing, as well as their role in optimizing tasks such as filtering, detection, and compression. Additionally, the session will investigate the adaptation of metaheuristics for real-world engineering problems, such as system design, fault diagnosis, and process optimization, by highlighting their flexibility, efficiency, and ability to handle large-scale, nonlinear, and multi-objective optimization tasks. Contributions from researchers, practitioners, and experts in these areas are invited to share their recent advancements and insights, fostering discussions on future trends and the integration of metaheuristic methods into practical applications.

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

- 1. Metaheuristics;
- 2. Engineering applications;
- 3. Real-world applications;
- 4. Feature selection;
- 5. Image segmentation;
- 6. Constraint handling;
- 7. Benchmarks;
- 8. Novel approaches;

#### Submissions:

Papers should follow the template announced on the IIHMSP 2025 conference website (https://iihmsp25.csie.cyut.edu.tw), and be submitted via Microsoft CMT system and then select SUBJECT AREAS: **SS-03: Metaheuristic Algorithms and Applications** for submission.

#### **Conference Proceeding Information:**

Papers that are presented orally at the conference and meet the publication requirements of IIHMSP-2025 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 2025 extends the dates, follow those dates announced on the website)

Paper submission deadline: May 30, 2025 Acceptance notification: July 30, 2025 Camera-ready copy and registration: July 15, 2025

#### For more information:

Please visit the IIHMSP 2025 official websites (https://iihmsp25.csie.cyut.edu.tw or https://iihmsp25.github.io/) or contact the organizers of this special session as follows:

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