

**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 Graph Algorithms and Applications

Call for Papers

Organizers: Prof. Ruo-Wei Hung and Prof. Ling-Ju Hung

This Special Session aims to foster a dynamic environment for presenting, exchanging, and discussing the latest advances in graph algorithms and their broad applications. Graph theory has become a cornerstone of mathematical research and computer science, offering critical insights and tools essential for solving complex challenges across a wide range of fields. Today, graph algorithms are fundamental for structuring and addressing real-world issues in areas as varied as computer networks, electronic circuit design, social network analysis, biological modeling, and data mining. The demand for high-performance, efficient algorithms that address diverse optimization problems has elevated graph theory's importance in both theoretical research and practical applications.

We invite researchers, mathematicians, and industry practitioners to submit original research papers that explore the mathematical foundations, computational techniques, and applied innovations within graph theory. We welcome submissions that advance current knowledge, whether through pioneering theoretical contributions, cutting-edge algorithmic designs, or novel applications that highlight the adaptability and impact of graph algorithms in addressing established and emerging challenges. Papers focusing on cross-disciplinary approaches and those proposing scalable solutions to real-world optimization problems are particularly encouraged.

Topics of interest for this Special Session include but are not limited to:

- Algorithms and Data Structures
- Complexity Theory
- Graph Theory & Combinatorics
- Combinatorial Optimization
- Algorithms on Strings & Graphs
- Graph Drawing & Labeling
- Computational Algebra & Geometry
- Computational Biology
- Algorithms for Big Data and Network Analytics
- Probabilistic & Randomized Algorithms
- New Computation Paradigms
- Experimental Algorithm Evaluation
- Distributed and Parallel Algorithms

- Mobile Agents
- Algorithmic Game Theory
- Circuits and Boolean Functions
- Approximation Algorithms
- Parameterized and Exact Algorithms
- Online Algorithms
- Streaming Algorithms
- Ad Hoc, Dynamic, and Evolving Networks
- Foundations of Cloud Computing

We look forward to your contributions that will enrich discussions and push the field's boundaries.

Submissions:

Papers should follow the template announced on the IIHMSP 2025 conference website (<https://iihm25.csie.cyut.edu.tw>) and be submitted via email to session organizer Prof. Ruo-Wei Hung at rwhung@cyut.edu.tw or Prof. Ling-Ju Hung at ljhung@ntub.edu.tw.

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://iihm25.csie.cyut.edu.tw> or <https://iihm25.github.io/>) or contact the organizers of this special session as follows:

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