

ICDAM-2024

5th International Conference on Data Analysis and Management

*Organized by London Metropolitan University, London, UK (Venue Partner)
in association with*

WSG University, Bydgoszcz, Poland, Europe

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Portalegre Polytechnic University, Portugal, Europe

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BPIT, GGSIPU, Delhi

Date: 14th - 15th June 2024

***** CALL FOR PAPERS *****

SPECIAL SESSION ON

[Computational Optimization and AI in Civil Engineering]

SESSION ORGANIZERS:

[Prof. Dr. Gebrail BEKDAŞ, Istanbul University- Cerrahpaşa, Turkey, bekdas@iuc.edu.tr

Prof. Dr. Sinan Melih NİGDELİ, Istanbul University- Cerrahpaşa, Turkey, melihnig@iuc.edu.tr]

SESSION DESCRIPTION:

[Optimization is an essential problem in civil engineering applications. The main aim of an engineer is to provide a magnificent design. In this design, the safety and esthetics factors are a must and also, the best possible solution must be searched for a specific factor such as cost and environmental factors. For advanced systems like passive and active control applications, the excellent tuning of these systems can be done via advanced optimization methods.

From the start of life, people used their brains to make something better in design in ordinary works. Due to that, metaheuristics are essential to living things and several inspirations from life have been used in the generation of new algorithms. These algorithms have unique features, but the usage of different features of different algorithms may give more effective optimum results in means of precision in optimum results, computational effort and convergence.

This session will include the latest developments in the optimization of civil engineering systems covering all classical approaches and new trends including metaheuristic algorithms. Also, artificial intelligence and machine learning methods are included to predict optimum results by skipping long optimization processes.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Structural control
- Computational methods in optimum design of structures
- Optimization problem in construction management
- Optimization problem in transportation
- Optimization problem in geotechnics
- Optimization problem in hydraulic
- Prediction via machine learning for civil engineering problems
- Artificial Intelligence in design of civil structures

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **Computational Optimization and AI in Civil Engineering**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at <https://icdam-conf.com/downloads> . All submitted papers will be reviewed on a double-blind, peer-review basis. The papers must be uploaded to the system via conference **online via Microsoft CMT Submission Portal** and the title, ID and abstracts of the papers must be send to melihnig@iuc.edu.tr.

NOTE: While submitting a paper in this special session, please specify **Computational Optimization and AI in Civil Engineering** at the top (above paper title) of the first page of your paper.

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