

Call for Competition

 IEEE CES Prize

Summer
Edition



Competition on Evolutionary Computation in the Energy Domain

Hangzhou, China (CEC 2025)
08-12 June 2025

Málaga, Spain (GECCO 2025)
14-18 July 2025

Call for Competition

Following the success of the previous editions at IEEE PES-GM, CEC, GECCO, and WCCI, we are launching another challenging edition of the competition at major conferences in the field of computational intelligence and power systems. This SSCI 2025 competition proposes one track in the energy domain associated with the risk-based optimization of aggregators' day-ahead energy resource management (ERM), considering uncertainty associated with the high penetration of distributed energy resources (DER). This testbed is constructed under the same framework of past competitions (therefore, former competitors can adapt their algorithms to this new track), representing a centralized day-ahead ERM in a smart grid with a 13-bus distribution network using a 15-scenario case study with 3 scenarios considering extreme events (high impact, and low probability). A conditional value-at-risk (CVaR) mechanism measures the risk associated with extreme events for a confidence level (α) of 95%. We also add some restrictions to the way in which initial solutions are generated. Finally, as in previous editions, manual repairs in the variables and tweak heuristics are not allowed.

Important Dates

CEC 2025 (paper not mandatory)

Paper submission due (Extended): 31 January 2025

Notification of acceptance: 15 March 2025

Final paper submission and early registration: 1 May, 2025

GECCO 2025 (paper not mandatory)

Abstract Deadline: January 22, 2025

Submission of Full Papers: January 29, 2025

Notification of acceptance/rejection: March 19, 2025

Camera-ready deadline: April 9, 2025

Note: The participants should submit the files to the registration form <https://bit.ly/3DZALdW> by 1st June 2025. Submission of papers to CEC and GECCO 2025 are not mandatory, but welcome.

Organizers

José Almeida, Fernando Lezama, João Soares, Bruno Canizes, Filipe Sousa, Zita Vale

If you have any questions kindly send mail to José Almeida (jorga@isep.ipp.pt)



Research Group on Intelligent Engineering and Computing
for Advanced Innovation and Development