17th APCA International Conference on Automatic Control and Soft Computing (CONTROLO 2026)

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https://controlo2026.apca.pt/

Special Session on
“Operational Research and Optimisation”

Organised by

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Call for Papers

Description:

This special session is organized in behalf of the Portuguese Operational Research Society (Associação Portuguesa de Investigação Operacional - APDIO). It aims to provide examples of state-of-the-art approaches to relevant optimisation problems.
Contributions on problems that can be tackled by optimisation and control, such as those arising in spreading phenomena, are welcome.
New results on the application of optimisation approaches, possibly hybridised with other techniques, for example, from AI or soft computing, are also welcome.

Topics of interest include (but are not limited to):
Optimization
Metaheuristics
Soft computing
Interdiction problems
Routing problems

Short CV of Each Organizer

Samuel Moniz is a researcher and professor specializing in Operations Research and Operations Management. Currently a Visiting Professor at MIT and a Professor at the University of Coimbra's Faculty of Sciences and Technology, he develops advanced optimization methods to tackle complex challenges in supply chain and manufacturing systems. He holds a PhD from the MIT Portugal Program (jointly at the Universities of Porto and Lisbon).	
Filipe Alvelos is an Associate Professor at the School of Engineering of the University of Minho and a Researcher at ALGORITMI/ LASI. He holds a PhD in Industrial Engineering and Systems. His research focuses on applying optimisation (mathematical programming and metaheuristics) to relevant societal problems, in particular, kidney exchange problems and wildfire management. He was PI of the FCT project "An Optimisation Framework to reduce Forest Fire" (PCIF/GRF/0141/2019) and is locally responsible for the ongoing Compete 2030 project "Firesys – AI-empowered Decision Support System for Wildfire Management". He chaired the Optimisation and Wildfire Conference (2024). Key recent publications include dispatching and routing resources for wildfire initial attack (Networks, 2025), forest management with fire simulation (EJOR, 2025), iterated local search for wildland fire suppression resource placement (EJOR, 2023), and a robust optimisation approach for the same problem (ITOR, 2025). He received the Isabel Themido Prize for best paper in Operational Research (2022-2024). He serves as Associate Editor of Omega - The International Journal of Management Science. He is the Vice-President for International Affairs of the Portuguese Association of Operational Research (2022-).