CALL FOR PAPERS - SPECIAL SESSION
"Artificial Intelligence and Optimization Methods for Smart Healthcare Systems"
for CODIT 2026
July 13-16, 2026 ▪ Bari, Italy

Session Co-Chairs:

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Session description:

The rapid digital transformation of healthcare systems has generated unprecedented volumes of data and increased the complexity of clinical, operational, and organizational processes. Artificial Intelligence (AI) and optimization methods have emerged as key enablers for improving the efficiency, quality, safety, and sustainability of modern healthcare services. This Special Issue aims to present research on AI-driven models, algorithms, and optimization techniques designed to support intelligent decision-making in smart healthcare systems.

The Special Issue welcomes contributions addressing theoretical advances, methodological developments, and real-world applications of machine learning, deep learning, explainable AI, and optimization approaches in healthcare. Topics of interest include, but are not limited to, clinical decision support systems, predictive diagnostics, personalized medicine, resource allocation and scheduling, medical imaging analysis, remote patient monitoring, and digital health platforms. Particular emphasis is placed on trustworthy, interpretable, and human-centric AI solutions that ensure transparency, robustness, and ethical compliance in healthcare environments.

By bringing together multidisciplinary perspectives from engineering, computer science, and healthcare domains, this Special Issue seeks to highlight innovative approaches that enhance patient outcomes, optimize healthcare operations, and contribute to the development of resilient, data-driven, and intelligent healthcare systems.

The topics of interest include, but are not limited to:

- AI-Based Clinical Decision Support Systems
- Machine Learning for Medical Diagnosis and Prognosis
- Explainable and Trustworthy AI in Healthcare Applications

- Optimization of Healthcare Resources, Scheduling, and Workflow Management
- AI-Driven Medical Imaging Analysis
- Predictive Analytics for Personalized and Precision Medicine
- AI-Enabled Digital Health Platforms
- Secure and Ethical AI Solutions for Healthcare Systems

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2026:** **http://controls.papercept.net/conferences/scripts/start.pl**. In PaperCept, click on the **CoDIT 2026 link "Submit a Contribution to CoDIT 2026" and follow the steps.**

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

February 07, 2026: deadline for paper submission

April 30, 2026: notification of acceptance/reject

May 20, 2026: deadline for final paper and registration