

CALL FOR PAPERS - SPECIAL SESSION

"Recent advances in Explainable AI (XAI) for Smart Systems"

for CODIT 2025

July 15-18, 2025 • Split, Croatia

Session Co-Chairs:

- Prof. Zahra Kodia, ISGT, University of Tunis, Tunisia (email: <u>zahra.kodia@isg.rnu.tn</u>)
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Session description:

In recent years, Explainable AI (XAI) has emerged as a critical area of research to address the challenges of interpretability and transparency in intelligent systems. It aims to enhance trust, transparency, and accountability by providing insights into how AI models work, why they make specific decisions, and what factors influence their outputs. This is crucial for ensuring fairness, identifying biases, and complying with regulations in critical fields like healthcare, finance, and e-learning. XAI also helps balance the trade-off between model complexity and interpretability, making advanced AI systems more accessible and reliable for diverse users.

This special session will focus on recent advances in XAI methodologies, tools, and applications within the context of smart systems. It deals with the problem of improving transparency, interpretability, and trustworthiness in intelligent systems through advancements in Explainable AI (XAI). The session aims to bring together researchers and practitioners to exchange insights, foster collaboration, and explore future directions for making AI systems more transparent, trustworthy, and user-friendly.

The goal is to explore recent developments in XAI techniques, tools, and applications, fostering discussions on how to design and implement intelligent systems that are both high-performing and explainable. The session also aims to promote interdisciplinary collaboration and to showcase practical applications of XAI across various domains, emphasizing its role in enhancing user trust and ensuring ethical AI deployment.

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

- Novel techniques and frameworks for model interpretability
- Evaluation metrics and methodologies for explainability
- Human-centric approaches to XAI design and implementation
- Applications of XAI in domains such as healthcare, finance, autonomous systems, and education
- Case studies and real-world examples of explainable intelligent systems
- Enhanced mechanisms for XAI
- Deep learning & XAI methods
- Natural language processing for explanations
- Trust & explainable Al

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by February 07, 2025:

http://controls.papercept.net/conferences/scripts/start.pl. In PaperCept, click on the CoDIT 2025 link "Submit a Contribution to CoDIT 2025" 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, 2025: deadline for paper submission April 27, 2025: notification of acceptance/reject May 17, 2025: deadline for final paper and registration