Health and Technology: Advanced Optimization Methods

Session chairs :

- Maria Zemzami - l'Ecole Nationale Supérieure d'Arts et Métiers - Université Mohamed V (maria.zemzami@gmail.com)
- Nhan-Quy Nguyen – Université de Technologie de Troyes (nhan_quy.nguyen@utt.fr)

The rapid evolution of technology and the increasing amount of data available in the healthcare sector have opened up vast opportunities for the application of advanced optimization methods. This special session focuses on the most innovative and effective solutions related to the integration of technology and optimization in healthcare management systems. We aim to provide an overview of current research themes in the fields of operations research, statistics, and technology, specifically as they apply to the health domain. The session will foster discussions on diverse applications of advanced optimization techniques within healthcare data management, interoperability, and analysis.

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

- Advanced optimization methods applied to Electronic Medical Records (EMR) management
- Interoperability solutions in healthcare systems leveraging optimization techniques
- Application of artificial intelligence and machine learning in optimizing healthcare decision-making processes
- Integration of decision support tools optimized for data management in healthcare
- Innovative approaches to optimizing patient-centric healthcare delivery models
- Optimization strategies for healthcare data management, including data quality, security, and privacy
- Emergency management optimization using advanced data analytics and technology