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OPTIM-ACEMP 2025 Special Session Proposal

The OPTIM-ACEMP 2025 Conference will include Special Sessions organized on highly specialized topics within the conference scope that have not been covered in previous editions. The organizers of these sessions must observe the conference scope and submit a Session Proposal to the Special Session Chair (see below) for acceptance.

Please provide details of the session in the form below. At least one (and max. two) session organizer is required to provide contact data and a short biography.

Session Details:

Special Session Title: AI and Medical Sensors for Healthcare

Session description (session scope, novelty, goals; 100-200 words):	Keywords, topics:
<p>The proposed special session focuses on the transformative role of artificial intelligence (AI) and advanced medical sensors in healthcare. With the rapid integration of AI into medical diagnostics, treatment planning, and patient monitoring, this session seeks to explore innovative applications that enhance precision, efficiency, and patient outcomes. Topics will range from AI-driven diagnostic tools to wearable sensors enabling real-time health monitoring, with an emphasis on practical solutions and emerging trends. The session aims to unite experts from healthcare, AI, and sensor technology, encouraging cross-disciplinary collaboration, addressing current challenges, and showcasing innovative applications of these technologies in advancing the future of personalized healthcare.</p> <p>Topics:</p> <ul style="list-style-type: none"> • AI-Powered Diagnostics • Wearable Medical Sensors for Real-Time Monitoring • AI in Personalized Medicine • Sensor-Based AI for Elderly Care • Clinical Decision Support Systems • AI in Predictive Healthcare Analytics • Medical Robotics and AI • Ethical and Regulatory Considerations in AI and Medical Sensors • AI and Sensors in Mental Health Monitoring • AI-Driven Health Interventions in Developing Countries 	<p>Artificial Intelligence Healthcare Medical sensors Wearables</p>

Organizer(s) Details:

First (main) organizer (title, name and surname): Dr Sanjib Raj Pandey	
E-mail: sanjib.pandey@aru.ac.uk	Affiliation: The Royal Marsden NHS Foundation Trust, UK Anglia Ruskin University, Cambridge, UK
Short bio: Dr. Sanjib Raj Pandey is an experienced computer and interoperability specialist with a passion for generating innovative ideas and formulating practical solutions to healthcare and other relevant challenges. After completing	

his PhD in London, UK, he began his career at the NHS as a senior integration engineer, software developer, and research associate, focusing on the design and development of various automation and advanced applications in the healthcare sector. With over 14 years of experience, Dr. Pandey has taught a wide range of Computing and IT modules from Level 3 to Master's level at various colleges and universities across London.

In addition to his part-time teaching, he actively engages in academic and industry research. His research interests include health science data, decision support systems, fuzzy logic, temporal logic (knowledge representation and reasoning), AI, machine learning, intelligent and automation systems, case-based reasoning, software development, rule-based systems, and clinical decision support systems for developing countries. Dr. Pandey is broadly interested in health informatics and healthcare delivery systems, with a strong focus on knowledge transfer.

Second (optional) organizer (title, name and surname): Dr Mahdi Maktabdar Oghaz

E-mail: Mahdi.maktabdar@aru.ac.uk

Affiliation: Anglia Ruskin University, Cambridge, UK

Short bio:

Dr. [Mahdi Maktabdar Oghaz](#) is a Senior Lecturer at Anglia Ruskin University, with over 15 years of research experience in AI and computer vision applications in healthcare and sustainability. He has authored over 35 articles in esteemed journals and conferences within the AI and computer vision domain, has reviewed numerous articles for relevant scientific journals, and chaired and organised several national and international conferences and workshops. Dr. Mahdi Maktabdar Oghaz embarked on his career as a postdoctoral researcher at the University of Technology Malaysia (UTM), contributing to a research project sponsored by Cyber Security Malaysia and the Ministry of Higher Education Malaysia. This endeavour aimed to enhance safety and security in cyberspace through AI and machine learning techniques. Subsequently, he joined Kingston University London's ROVIT research team to participate in the H2020 MONICA project, which focuses on enhancing crowd safety and security in large-scale outdoor events using video analytics, AI, and computer vision. In 2019, he advanced his career to Senior Lecturer at the School of Computing and Information Science, Anglia Ruskin University. Throughout his research journey, Dr. Mahdi Maktabdar has successfully published numerous articles in various international journals and conferences and secured a number of QR research funds on topics like AI applications in healthcare and sustainability.

Information:

- Send the proposal to Special Session Chair: NUME <mail> in order of its approval and publication.
- Deadlines: Special Session call – 14/09/2024 (should be completed by a list prospective papers), Full paper submission – 15/12/2024.
- IEEE IES Rules for Special Sessions organization within the IEEE-PEMC Conference:
<https://optim-acemp.com/call-for-special-sessions/>

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