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Καθηγητή του Instituto Universitário de Lisboa (Πορτογαλία)
και Distinguished Lecturer της IEEE Instrumentation and Measurement Society

Prof. Octavian Postolache

με θέμα

Merging Smart Sensors, IoT, AI and Digital Twins Technologies for Digital Transformation in Agriculture

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Abstract

The lecture focuses on the digital transformation of Agriculture where technologies such as smart sensors and IoT provide data from in-situ and remote measurements. Data-driven models that can improve decision-making and practices helping farmers work more precisely, efficiently and sustainably are discussed and how the Digital Twins may affect the future of agriculture. Elements of the IoT ecosystem that support the digital transformation of agriculture will be discussed including multimodal sensing and artificial intelligence. Digital twin (DT) is one of the key concepts of Agriculture 4.0, being a data-driven, digital replica of a real-world object or environment. DTs show great potential to improve both efficiency and sustainability and can remove key constraints of human observations and interactions particularly in the farming area.

Dr. Octavian Adrian Postolache is an electrical engineer and Full Professor with habilitation at ISCTE-Instituto Universitario de Lisboa and a Senior researcher at Instituto de Telecomunicacoes, Lisbon, Portugal. His fields of interest are smart sensors, WSN, IoT for precision agriculture, artificial intelligence for automated measurement systems, and intelligent transportation. Dr. Postolache is the author and co-author of 10 patents, 12 books, 21 book chapters, and more than 400 papers in international journals and indexed conferences with peer review. He is mentioned as top 2% most cited scientist according to Stanford - Elsevier five years in a row.
