Context aware systems for unstructured environments based on WSNs

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Abstract:

The area of context aware for structured environments such as homes, buildings, manufacturing, and others similar. However, as transformative initiatives such as the Internet of Things (IoT) take hold, we are dealing with environments that are not so well structured such as the ones mentioned above. One example of such unstructured environments is the vast amount of data gathered by wireless sensor network (WSN) that might have thousands of tiny sensors collecting many sorts of data. In such a case, just about every element of a traditional context aware system must be re-considered. In this talk, we will review the characteristics and features of context aware systems for well-structured environments, the characteristics and features of WSNs, and present a set of requirements for context aware systems suitable for unstructured environments based on WSNs.

Biography:

Juan R Pimentel is a Professor of Computer Engineering at Kettering University in Flint, Michigan, USA. He is an expert in the area of Internet of Things, Industrial Internet, safety-critical systems and industrial computer networks, particularly issues related to real-time protocols, safety-critical protocols, dependable automotive embedded distributed systems, and distributed industrial and embedded systems. He is a recognized international expert in the area of industrial communications and real-time and dependable protocols. He has written 3 books on networking, multimedia systems, and safety critical systems. He has worked with major manufacturing and process control projects involving products from companies such as Siemens, Rockwell, Schneider Electric, ABB, and GE-Fanuc.

Publication of speakers:

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Citation: Juan R Pimentel; Context aware systems for unstructured environments based on WSNs, Advanced Manufacturing 2020: May 21, 2020; London, UK