

Dr. Juan R. Pimentel

Dr. 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. He has also prepared and delivered seminars in Europe, Middle East, North and South America in areas such as Distributed Control Systems, SCADA, Communication networks, wireless industrial networks and protocols, Process monitoring and control, process safety, sensors and instrumentation, and information management.

As a 1980 graduate of the University of Virginia, his accomplishments include the co-development of the application layer for Profibus (with Siemens), and the development of FlexCAN, a CAN-based safety-critical architecture.

He has performed research at well known institutions around the world such as the Fraunhofer Institute at Karlsruhe-Germany, INRIA at Nancy-France, University of Padova in Italy, Universidad Politecnica de Madrid in Spain, Universidad Carlos III de Madrid in Spain, Universidad de los Andes, Bogota-Colombia, and UTEC, Lima, Peru. In 2007 he received the "Distinguished Researcher Award" from Kettering University for contributions in the area of industrial communication systems and automotive systems.

During the last few years he has been involved with wireless sensor networks (WSNs), telemetry systems using tv white spaces, software define radios (SDR), and platforms for deploying IoT technologies. In addition, he has been involved with technology transfer and commercialization, sustainable development and appropriate technology, human capacity for innovation, creative (real) innovation, innovation systems, and culture of innovation. He is currently writing a book on "Industrial Internet Connectivity"