

IoT and WSN for Health and Home Management

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Abstract:

The advancements in electronics, embedded controllers, smart communicating devices as well as the progress towards a better informed, knowledge based society increase the demand for small size, affordable sensors that allow accurate and reliable data recording, processing, storing and communication. This led to the paradigm known as Internet of Things (IoT) in which Wireless Sensor Nodes are most important elements.

The seminar will present research activities on development of IoT and WSN based system towards managing our health and home in a better way. A holistic view of IoT, its challenges and opportunities will be presented. A new protocol called Wellness protocol for designing wireless sensor based smart home will be discussed.

A short biography of Subhas Mukhopadhyay

Biography: Subhas holds a B.E.E. (gold medallist), M.E.E., **Ph.D.** (India) and **Doctor of Engineering** (Japan). He has over 26 years of teaching, industrial and research experience.

Currently he is working as a Professor of Mechanical/Electronics Engineering, Macquarie University, Australia and is Discipline Leader of the Mechatronics Engineering Degree Programme. Before joining Macquarie he worked as Professor of Sensing Technology, Massey University, New Zealand. His fields of interest include Smart Sensors and sensing technology, instrumentation techniques, wireless sensors and network, numerical field calculation, electromagnetics etc. He has supervised over 40 postgraduate students and over 100 Honours students. He has examined over 50 postgraduate theses.

He has published over **400** papers in different international journals and conference proceedings, written five books and thirty book chapters and edited **thirteen** conference proceedings. He has also edited **twenty-five** books with Springer-Verlag and **fifteen** journal special issues. He has organized over 20 international conferences as either General Chairs/co-chairs or Technical Programme Chair. He has delivered **292** presentations including keynote, invited, tutorial and special lectures.

He is a **Fellow** of IEEE (USA), a **Fellow** of IET (UK), a **Fellow** of IETE (India), a **Topical Editor** of IEEE Sensors journal, and an **associate editor** of IEEE Transactions on Instrumentation and Measurements. He is a **Distinguished Lecturer** of the IEEE Sensors Council from 2017 to 2019. He **chairs** the IEEE IMS Technical Committee 18 on Environmental Measurements.

More details can be available at

<http://web.science.mq.edu.au/directory/listing/person.htm?id=smukhopa>