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Special session 1

## **Engineering of IoT and Big Data Applications**

Many businesses and engineering organisations are beginning to realise a huge potential of the Internet of Things (IoT) and Big Data. There are quite a few technology and business leaders who agree that IoT technology is likely to bring about a new industrial revolution. The IoT based systems can capture and transfer massive quantities of rapidly moving data from sensors, as well as, deliver controls to sensors, actuators and various devices around the world. The IoT systems aim to realise entirely new ways of how various users recognize and engage with the world of "things" and humans. However, these systems, often generate vast numbers of data that need to be stored, processed and analysed to support various human activities. As the process of delivering, computing and handling massive amounts of various data is not trivial, the phenomenon is often called the Big Data problem.

However, majority of the Internet of Things and Big Data solutions fail to deliver what is promised. In part, this is due to still limited number of effective methodologies, case studies, models, protocols, tools, technologies, hardware and software development environments, as well as, solutions which the IoT and Big Data systems require for successful an implementation, deployment and secure operation. There is a shortage of system designers and developers who understand the IoT and Big Data technologies and who are able to face serious challenges these novel technologies represent.

The special session on Internet of Things and Big Data application aims to provide a platform for computer scientists, engineers, AI specialists, business leaders and academics to exchange their ideas, offer their insights and share experiences on how these new technologies can be harnessed, and how various challenges can be successfully addressed.