

# Colloquium on IoT in Industrial and Energy Systems Sustainability

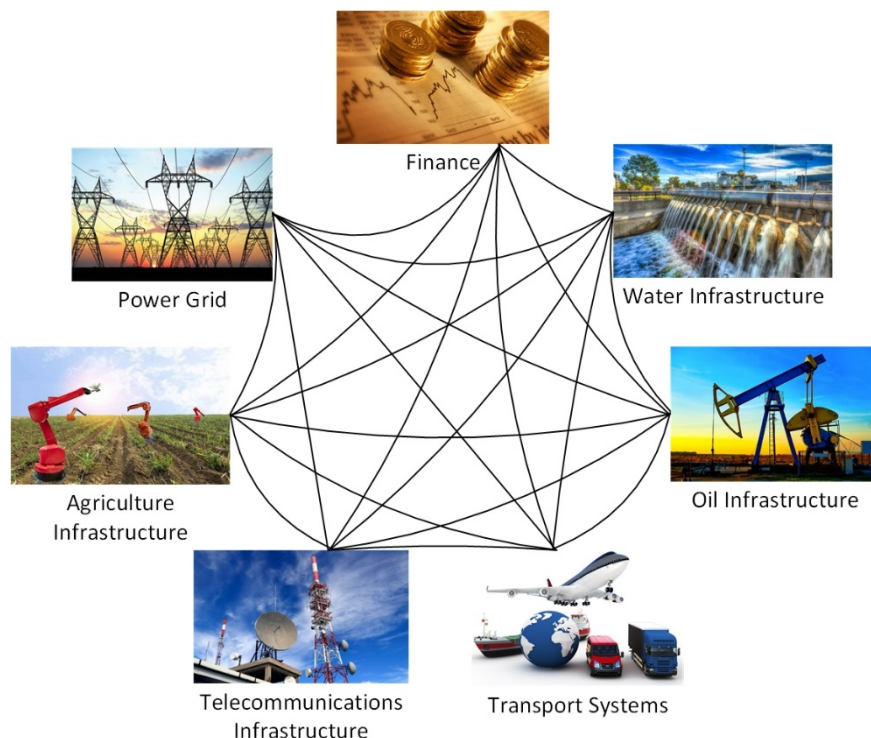
**Date:** Friday 7 December, 2018  
**Time:** 8.30am – 4 pm  
**Location:** Goods Shed North, CSIRO  
710 Collins St  
Docklands  
Melbourne Australia

## Overview

With the recent wave of disruptive technologies, the deployment of the Internet of Things (IoT) is becoming ubiquitous, ranging from common home and personal appliances, commercial to industrial to sophisticated safety-critical systems, such as pervasive healthcare, driverless vehicles and energy systems.

The IoT is addressing rising energy costs, sustainability, and code compliance by connecting, managing, and securing devices that collect data from sensors, sensor networks, and other cyber-physical systems. It is anticipated that by 2025 the number of IoT devices will grow globally to over 100 billion, and this can generate a revenue close to USD 11 trillion. Every person and every business will feel the impact.

This colloquium will present some of the aspects of IoT applications in the field of disruptive technologies and provide a forum of discussion between various stakeholders including academics, researchers, and industry professionals on recent advances in the area of IoT-based solutions for industrial and energy sustainability. It is also aimed at promoting collaboration and mutual exchange of knowledge between researchers. This colloquium is supported by Federation University, IEEE Computational Intelligence Society and IEEE Victoria Section.



## Invited Speakers:



Syed Islam  
Federation University



Rajkumar Buyya  
University of Melbourne



Akhtar Kalam  
Victoria University



Charles Karl  
Australian Road Research Board



Pierluigi Mancarella  
University of Melbourne



Andrew Stranieri  
Federation University



Bala Kumble  
Global Knowledge Alliance



Alireza Jolfaei  
Federation University



Alan L. Harvey  
Acupak

## Sponsors



## Program:

8.30 – 9.00	Registration and Tea/Coffee	
9.00 – 9.15	<b>Opening Remarks</b> by Professor Syed Islam Dean School of Science Engineering and Information Technology Federation University	
Session 1	Session Chair: Professor Syed Islam	
9.15 – 9.45	<b>IoT and Fog/Edge computing for Healthcare</b> Professor Rajkumar Buyya	
9.45 – 10.15	<b>IoT in Intelligent Transportation Systems</b> Dr. Charles Karl	
10.15 – 10.45	<b>IoT and Big Data: Legislations and Opportunities</b> Associate Professor Andrew Stranieri	
10.45 – 11.00	Morning Tea	
Session 2	Session Chair: Associate Professor Iqbal Gondal	
11.00 - 11.30	<b>IoT in Demand Management</b> Professor Syed Islam	
11.30 – 12.00	<b>Interoperability and Standards</b> Professor Akhtar Kalam	
12.00 – 12.30	<b>Intro to Cyber Security with Application to Energy Systems</b> Dr. Alireza Jolfaei	
12.30 - 1.00	Lunch	
Session 3	Session Chair: Dr. Alireza Jolfaei	
1.00 – 1.30	<b>The Role of DERs in Sustainable Community Energy Systems</b> Professor Pierluigi Mancarella	
2.00 – 2.30	<b>IoT in Food, Energy, and Water Nexus</b> Dr. Bala Kumble	
2.30 – 3.00	<b>Power supplies for IoT</b> Dr. Alan L. Harvey	
3.00 – 3.15	Afternoon Tea	
3.15 – 4.00	<b>Panel Discussion</b> – Future Challenges for IoT in industry (All speakers) Panel moderator: Professor Syed Islam	