## IEEE Communications Society Distinguished Lectures 2015 Asia Pacific Region

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He provided **two IEEE Communications Society Distinguished Lectures in Northern Australia in June 2015**. As the IEEE ComSoc Asia Pacific has already exhausted DL funding at the time, no travel funds were provided by the IEEE. The local chapters covered lodging.

## Lecture 1:

Title: "Internet to 'Internet of Things' to 'Internet of Everything' - The Evolution Continues, Sponor: The IEEE Northern Australia Section, NA CommSoc Chapter, and the James Cook University of Science, Technology and Engineering

Venue: Engineering and Physical Sciences II, James Cook University, Townsville, Australia

Date: 3:00-4:00PM, June 24, 2015

Contact: Prof. Mohan Jacob Mohan.Jacob@jcu.edu.au and Mathew Whelan

## Lecture 2:

Title: "Internet to 'Internet of Things' to 'Internet of Everything' - The Evolution Continues, IEEE Distinguished Lecture by A. Jayasumana, The IEEE Northern Australia Section, NA CommSoc Chapter and the James Cook University of Science, Technology and Engineering,

Venue: Cairns, Australia.

Date: 4:00-5:00PM, June 25, 2015.

URL: (http://cecs.anu.edu.au/seminars/more/SID/3591)

Contact: Prof. Mohan Jacob Mohan.Jacob@jcu.edu.au and Mathew Whelan

Each lecture was attended by ~25 participants. The presentation at Cairns had a significant presence of members from industry while that in Townsville was dominated by faculty and graduate students. James Cook University is in the process of starting a degree program wit specialization in Internet of Things (IoT), and thus this presentation was very timely. I also met a group of Professors at Townsville campus to discuss issues related to a curriculum on IoT.

## Network Aware Nodes: A Localization-Free Self-Organization Approach for Internet of Things

Abstract: Network based applications continue to pervade into all aspects of our lives and the environment. The cost and size trends of motes, RFIDs and nano devices point to future massive-scale networks. Price and performance trends of technologies related to computation, communication, storage and sensing continue to fuel this growth. Internetworking itself results in increased utility and flexibility of applications and devices being networked, leading to even further expansion of their reach. Evolution of the internet landscape will be considered with focus on technologies aimed at bridging the gap between physical and digital worlds. We will look at selected prototypes, emerging technologies and technology trends to provide a perspective of 'Internet of Things' to 'Internet of Everything.' Challenges involved in self-organization of large-scale networks of tiny devices will be addressed along with a technique for achieving network awareness at individual nodes

Speaker Bio: Anura Jayasumana is a Professor of Electrical and Computer Engineering at Colorado State University, where he also holds a joint appointment in Computer Science. He is the Associate Director of Information Sciences & Technology Center at Colorado State. He is a Distinguished Lecturer of the IEEE Communications Society. His research interests span high-speed networking to wireless sensor networking, and anomaly detection to DDoS defense. He has served extensively as a consultant to industry ranging from startups to Fortune 100 companies. He received the B.Sc. degree from the University of Moratuwa, Sri Lanka and M.S. and Ph.D. degrees in Electrical Engineering from the Michigan State University. Prof. Jayasumana has supervised 20 Ph.D. and 50+ M.S. students, holds two patents, and is the coauthor over 250 papers. He is the recipient of the Outstanding Faculty Award from the Mountain States Council of the American Electronics Association.