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Telecommunications & the Digital Economy

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Using Visible Light for Communications and Positioning

Two important emerging technologies presented by Jean Armstrong

Tuesday, 25th November 2014

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This event is fully booked or has passed.

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Light emitting diodes (LEDs) are rapidly replacing conventional incandescent and fluorescent lights in applications as diverse as indoor lighting, and road traffic signals. These LEDs, though designed for lighting not communication, can be modulated at frequencies in the megahertz range. In Visible Light Communications (VLC) these signal are used to carry high data rate signals, for example data rates of up to 1Gbit/s have been reported using standard white lighting LEDs. VLC can be used in association with radio frequency communications (eg. Wi-Fi or cellular networks) or as a means for data broadcasting. LEDs can also be used for Visible Light Positioning (VLP) which enables very accurate indoor positioning capabilities. This presentation will describe the state of the art and future directions for these two important emerging technologies.

AFTER the conclusion of Jean's presentation at 1.30pm, there will be an opportunity for you to network with your industry colleagues over tea and coffee until 2.00pm.

Date and Time

Tue, 25 Nov 2014

12:30 - 14:00 AEDT

Location

Telstra Conferencing Centre
Level 1 / 242 Exhibition St
Melbourne VIC 3000
Australia

Presenter(s)

Jean Armstrong ? Professor Monash University

Jean Armstrong is a Professor at Monash University where she leads the Optical Wireless Communications Laboratory. She has worked as a telecommunications engineer in both industry and academia, in Australia and Scotland. Her communications research spans both optical and wireless communications and she pioneered the application of OFDM to optical communications. She has published numerous papers on her research and has a number of commercialized patents on aspects of OFDM. During her career she has received numerous awards including induction into the Victorian Honour Roll of Women, the 2014 IEEE Communications Society Best Tutorial Paper Award, the Peter Doherty prize for the best commercialization opportunity in Australia, and a Zonta International Amelia Earhart Fellowship. She is currently a member of the Australian Research Council (ARC) College of Experts.

Presentation Media

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