

Talk on “Which Comes First for SCADA and Automation Systems: Data Engineering or Database Engineering”

Organised by the Consulting Engineering Special Interest Group, IEM

BEM Approved CPD/PDP Hours: 2 Ref No. IEM19/HQ/276/T

Date : 5th July 2019 (Friday)

Time : 5.30 pm – 7.30 pm (Refreshments will be served at 5.00 pm)

Venue : Tan Sri Prof. Chin Fung Kee Auditorium, 3rd Floor Wisma IEM

Speaker: Ir. S. Vignaeswaran, PEPC (Malaysia) RPEQ (Australia)

SYNOPSIS

There has been so much hype on Industrial Revolution 4.0, big data, data analytics, Artificial Intelligence etc that the atomic issue of data and its use has had a multitude of misconceptions over the years. The understanding of data and its container, the database, is fundamental to the correct and successful application of all facets of SCADA and automation systems. There has always been a rationale behind the decisions in data and database design and engineering but this has been sadly lost over the years due to a multitude of reasons. However, the effect of this loss has been felt by failed systems implemented, successful systems that cannot be maintained, outside designers, systems over-inflated in cost, sizing and quality, or under-sized in all aspects. This has led to over dependence on international expertise, services and products for no reason.

If data is the new ‘oil’ or ‘black gold’ in the digital economy, shouldn’t we be able to differentiate it from the ‘fool’s gold’? If that ‘oil’ / data is to be stored for the long term with infinite permutations of use, then shouldn’t the right container / database be provided for it? These are fundamental questions that are asked in the design of SCADA and critical automation databases. The days of running ‘black boxes’ are over and the issues of the US-China trade war and Huawei are, a very good insight into events and the digital landscape that we are about to come into contact with.

It is hoped that this talk will simulate discussions on these and other related issues that will allow Malaysian designers to produce far superior SCADA and automation systems, in the future. This is because the ‘devil is in the details’ as far as advanced technology is concerned, now and forever.

BIODATA OF SPEAKER



A specialist in Electrical and Organizational Information automation systems, Ir. S. Vignaeswaran has established his career in the design and implementation aspects of Electrical, IT, Distributed Control Systems (DCS), Supervisory Control and Data Acquisition Systems (SCADA), Substation Control System (SCS) and, has published international papers on them. The publication reflects a wide area of the utility industrial sector and has leveraged on his electrical, instrumentation and industrial control expertise. His interest in SCADA systems and subsequently

project management, has led him to present an ‘out of the box’ project and information management paper to the Institution of Engineers, Australia, as part of his Australian chartered certification.

He has a wide area of experience in the design, consultancy and field work in the Oil & Gas, Building Services, Utility and Mining electrical engineering arena. He has worked overseas in a USD 3 billion dollar Saudi Arabian King Saud University project and has a high passion for cross-discipline applications in automation, advanced information systems, electrical and project management. With a formal education in Electrical Engineering from Monash University, Australia in 1989, Ir. S. Vignaeswaran has gone on to obtain his Masters of Science in Business Information Systems / Information Technology from the University of Keele, United Kingdom. His MSc (BIS/IT) thesis in 2002 was based on the development of a Web-based SCADA system.

Ir. S. Vignaeswaran

Chairman

Consulting Engineering Special Interest Group, IEM

FEE ANNOUNCEMENT

(Effective: 1st October 2017)

Members:

- (i) Registration Fee: No Charge
- (ii) Administrative Fee:
 - (a) Online RM15
 - (b) Walk-In RM20

Non-Members:

- (i) Registration Fee: RM50
- (ii) Administrative Fee: RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).

- To secure your seat, kindly register online at www.myiem.org.my

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