



1-Day Seminar on TODAY'S SMART-CONNECTED SECURITY & SAFETY SYSTEMS

by Ir. Dr JG Khor

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The A 1-day seminar, entitled “Today’s Smart-Connected Security and Safety Systems” to address the demand for more information about the application of *Internet of Things (IoT)* technologies across different engineering disciplines and their impacts on the safety and security industry was held on the 26th Nov 2018 at the IEM Penang Secretariat. The seminar was organized by the Electronic Engineering Technical Division (eETD) and was attended by attracted over 20 participants from both industry and academia.

The first speaker was Mr. Adrian Tan, a Senior Manager from Bosch Security Systems who began his session by discussing the use of IoT technologies for safety and security as well as the emerging technologies in this space. He introduced the concept of automated multi-sensor multi-actuator network in buildings and facilities for various applications including fire control, crowd management, etc. He also provided various examples of IoT applications for building services and factory facilities management. In the second part of his session, Mr. Tan focused on the use of smart cameras as a sensors and the possibilities that may emerge from image processing and machine vision. He talked about the use of Artificial Intelligence (AI) as well as the different layers of abstraction in machine vision applications. At the end of his talk, Mr. Tan opened the session for questions from the floor, which he then proceeded to address in great detail. Most of the questions were centred around software stacks for smart cameras as well as a few on the social impact of applying AI in cameras in public places.



The speaker for the second session was Mr. KS Tai, the Regional Sales Manager of HID Global. Mr. Tai’s session focused on smart access control system. Mr. Tai started with the fundamentals of radio frequency identification (RFID) technology, covering the basics such as the associated ISO standard and data format before proceeding to discuss the market and technology trends. He also covered the different types of smart card technologies, touching on parameters such as cost, reliability as well as their relative level of security. Mr. Tai kept the audience intrigued with interesting stories of security breaches and anecdotes about

how smart cards can easily be replicated by hustlers operating from the back of a car. Before ending his session, he gave the participants a demonstration of the different types of smart card and smart card reader technologies.



Overall, the event generated a lot of interests from the participants, as indicated by the high level of engagement during the Q&A sessions as well as the practical demonstration sessions. Mr. Adrian Tan and Mr. KS Tai were presented with certificates of appreciation from IEM by Ir. Dr. Lee Choo Yong and Ir. Dr. JG Khor respectively.

Speakers, Mr. Adrian Tan and Mr. KS Tai, presented with certificates from Ir. Dr. Lee and Ir. Dr. Khor respectively.



Speakers and participants of the Smart-connected Security & Safety Systems Seminar