



Seminar presented by ASTRI's Software & Systems Technology Group

Speakers:	Mr. Andy Lam , Deputy R&D Director, ASTRI Mr. Louis Ngai Yat-cheung , Senior Engineer, ASTRI Mr. Au Wing Hei , Senior Engineer, ASTRI
Date / Time:	27 November 2015, Friday, 2:30 – 4:00 pm (Registration starts at 2:15pm)
Venue:	Conference Halls 01 & 02, G/F, Core Building, Phase I, Hong Kong Science Park
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Online Registration:	http://www.astri.org/registration-form/?pid=7975

Internet Of Things (IoT) via Bluetooth Low Energy (BLE) For Smart City

by **Mr. Andy Lam**

Mr. Andy Lam joined ASTRI in 2005 and is currently Deputy R&D Director in Software & Systems Group in ASTRI. His expertise includes IoT, GIS, health-care, mobile computing, man-machine Interface, digital broadcasting TV/IPTV, DRM, multimedia streaming etc. He has published a number of papers and patents on multimedia/communication related technologies.



Abstract

According to Bluetooth Special Interest Group (SIG), more than 90 percent of Bluetooth-enabled smart phones will support Bluetooth Low Energy (BLE) by 2018. This together with the ubiquitous smart phones, being able to connect to the internet via ever advancing wireless technologies, may pave the first wave to realize the potential of Internet of Things (IoT). In this talk, a software stack solution (from mobile to cloud), specifically for the development of enterprise and consumer grade BLE proximity applications and systems, will be presented. The technical challenges in system scalability and application related issues will also be addressed.

Intelligent Wearable Camera System

by **Mr. Louis Ngai Yat-cheung**

Mr. Louis Ngai has 10+ years of work experience in the ICT industry, focusing on multimedia and digital broadcasting technologies, consumer and enterprise software systems design and development. Prior to joining ASTRI, he was a senior specialist at Toshiba Electronics Asia, Ltd. He received his B.Eng. degree in Electronic Engineering and M.Sc. degree in Computer Science from the Chinese University of Hong Kong.



Abstract

Wearable and Ubiquitous Computing has become the next major wave of technology and market trend after Mobile Internet Computing, since the post PC Era. Most of the industry players are focusing on the hardware sensing technologies. The overall system and operation software aspects are still in the early stage. Our work aims at developing a highly customized and optimized Linux/Android OS platform to enable the rapid development of innovative wearable camera applications, e.g. Head Mount Display for Virtual Reality experience. Our platform consists of a sensor fusion engine, a machine learning framework, a low-latency kernel scheduler, and a well-designed application framework. In this talk, the design of this system and its technical challenges will be discussed.

Mobile Development on Android

by **Mr. Au Wing Hei**

Mr. Au Wing Hei is a senior software engineer in ASTRI. He received the M.Phil in Electrical and Electronic Engineering from The Hong Kong University of Science and Technology. He has been working in the area of mobile application development for more than 5 years.



Abstract

In this talk, we will present our current mobile development on the latest Android platform. A variety of applications have been developed on top of our mobile communication protocols for device monitoring and user interactions. Some of the essential elements of mobile development: user interface design and leverage the data and network processing limitations via the cloud server, will also be addressed in this talk.