

## ICTSIG Digital Class (August 2017)

# PROGRAMMING ARDUINO USING C++ PART 3

Organised by Information and Communications Technology Special Interest Group, IEM

BEM Approved CPD/PDP Hours: 2 CPD Ref No: IEM17/HQ/023/T

**Day:** 12 August 2017, Saturday

**Time:** 11.00 am – 1.00 pm

**Venue:** YES Room, Second Floor, Bangunan Ingenieur, IEM, Petaling Jaya, Selangor.

**Speaker:** Ir. Lee Mun Poh and Mr. Pu Chuan Hsian Grad. IEM and Ir. Chai Chen Sing

### PREREQUISITES:

As this is a hands on class, participants are required to bring your own Laptop.  
(All the necessary software will be provided during the class)

### SYNOPSIS

With the advancement of ICT technology in recent years and its impact in today's world, ICT application has become more significant than ever before in human history. ICT application and its related technology had moved forward, comparatively to the field of engineering, by leaps and bounds. It opens up new businesses, new ways of thinking, increase efficiency and productivity.

How could engineers take advantage of the advancement in ICT in future engineering innovations and engineering applications? To do this, engineers must be aware of the current as well as future ICT technology trend and be capable to equip themselves with the essential ICT knowledges and skills. With this in mind, the digital class is formed.

One of the objective of the digital class is to disseminate the current development trend in server, communication and web technology and its impact to the digital world. The primary objective of the digital class is to introduce computer programming using modern language such as Java, Javascript, Python and C++ instead of PASCAL and FORTRAN. Web design skill such as designing web pages using HTML and CSS will also be introduced. The participants will have the opportunity in a later stage to apply their programming skill to micro controller such as Arduino and Raspberry Pi. The class is designed especially for members who had no prior programming skill or experience.

### ANNOUNCEMENTS TO NOTE:

- Free Admission for IEM member.
- Non-members may also attend the class but will need to pay a commitment fee of **RM50**. GST is inclusive.
- Limited seats are available on a "first come first served" basis (maximum 10 participants). **To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my).**

### PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

### SCHEDULE DIGITAL CLASS

- APR 2017 - INTRODUCTION TO JAVA PROGRAMMING PART 2
- MAY 2017 - PROGRAMMING ARDUINO USING C++ PART 1
- JUNE 2017 - INTRODUCTION TO JAVA PROGRAMMING PART 3
- JULY 2017 - PROGRAMMING ARDUINO USING C++ PART 2
- **AUG 2017 - PROGRAMMING ARDUINO USING C++ PART 3**
- SEPT 2017 - INTRODUCTION TO WEB PAGE DESIGN WITH HTML, JAVASCRIPT AND CSS PART 1
- OCT 2017 - INTRODUCTION TO WEB PAGE DESIGN WITH HTML, JAVASCRIPT AND CSS PART 2
- NOV 2017 - INTRODUCTION TO WEB PAGE DESIGN WITH HTML, JAVASCRIPT AND CSS PART 3
- DEC 2017 - INTRODUCTION TO PYTHON PROGRAMMING PART 1

### BIODATA OF SPEAKER

#### 1. Ir. Lee Mun Poh

Ir. Lee Mun Poh graduated with a Bachelor of Science (Mechanical Engineering) from the University of Sussex (UK) in 1975. He is a registered Professional Engineer with a Practising Certificate (Mechanical), Board of Engineers, Malaysia. Ir. Lee has more than 40 years working experience in the field of industrial automation and controls. He is currently the Adviser to IEMICTSIG. He specializes in technical products for the Maker Movement and the IOT. He has more than 10 years working experience in the timber industry in Syarikat Jengka Sdn. Bhd and completed projects in the timber, electronic, chemical and automotive industries.

#### 2. Mr. Pu Chuan Hsian Grad. IEM

Mr. Pu Chuan Hsian has 16 years of experience in software development, research and teaching of various programming languages. Currently, he is senior Engineer in Mimos Berhad, responsible of developing information security systems with Java, C++, javascript and Python Programming languages. He is responsible of developing Android Applications for mobile phone mainly with Java programming. Prior to joining Mimos, Mr. Pu was a lecturer in Taylors University, his expertise is to teach mathematics and programming for science and engineering students in American Degree Transfer Program. He pioneered the use of Wolfram Mathematica and introduced programming concepts to enhance student's learning experience in the university's program. For educational background, he obtained Master of Engineering in Telecommunication from Multimedia University, 2005, B.Eng. Electronics and Computing from Nottingham Trent University, UK, 2001.

#### 3. Ir. Chai Chen Sing

Ir. Chai Chen Sing had 24 years of experience in the engineering industry. His experience range from consulting services and contracting in construction industry, SCADA implementation for processing plant, web application development and machine to machine communication. He is currently the principal consultant for Versoset Engineers Sdn Bhd and also the technical director for Mercatura, a m2m solution provider. He heads the technical development for integrated custom made embedded system as well as web application development utilising cloud solution. Ir. Chai Chen Sing graduated from University of New South Wales, Australia in 1992. He served as committee members of ICT Special Interest Group since 2014 and currently, he is the chairman for the session from 2016 to 2017.

#### Ir. Chai Chen Sing

Chairman,

Information and Communication Technologies Special Interest Group