Ref No.: HKATC - 119

18 July 2017

To: All FHKI Members

Hong Kong Automation Technology Council (FHKI Group 32) is going to organize a series of training courses for industry practitioners for consumer, industrial and automobile products. The third course will focus on Intelligent Control and Industrial Internet of Things (“IIoT”). Details are as follows:

<table>
<thead>
<tr>
<th>Date:</th>
<th>10 Aug, 2017 (Thursday)</th>
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<tbody>
<tr>
<td>Time:</td>
<td>9:30am - 4:30pm</td>
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<tr>
<td>Venue:</td>
<td>Room 1505 (Lift 25/26, 1/F), HKUST</td>
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Training Purposes:
- Refresh technical basics and knowledge in the specified domain
- Learn the latest information in the automation field
- Applications sharing
- Hands-On laboratory to gain more insight of the domain

Target Audience:
- Management, Line Managers, Engineers & Technicians who want to gain basic knowledge in automation
- All FHKI members and industry practitioners

Content:

**Automation Introduction**
- Overview: Automation System
- Intelligent Manufacturing Product Lines: Intelligent controller, field bus, I/O module, special module, industrial solutions, application cases, etc.
- Introduction to SoftPro Software: IEC-61131-3 Programming Industrial Automation Systems
- Case Study: Robotic control, automation packaging line, smart manufacturing & data acquisition, etc.

**Industrial Cloud Platform**
- Introduction to Industrial Information Cloud Platform: Definition & importance
- Architecture of Cloud Platform: How it works & requirements
- Built-in Functions of Cloud Platform: Data Parsing, Remote HMI, Remote Diagnosis, Remote Programming, Smart Data Analysis, Video Stream, API, etc.
- Development Kit of Cloud Platform: Complex programming procedures are encapsulated into Development kit. It can be easily implemented in your own Control System or program.
Case Study: Smart manufacturing & data acquisition, analysis & management.

Future of Cloud Platform

Hands-on Laboratory
- Tour @HKUST Lab: HKUST Robotic Research Institute
- Program Design/Configuration: IEC-61131-3 Programming Industrial Automation Systems (using ladder diagram and struct text)
- Write Program: Start simple task (based on Ladder logic and struct text), including logic control, motion control and HMI programming
- Upload/Download Program: Demo showcase
- Connecting to IIoT: Redesign of cloud web visualization and data connection
- Equipment Access: Use and configuration of the controller end and the communication customer end, adding equipment into cloud platform.
- Data transformation: Send data by the communication customer end (based on OtoStudio basic knowledge)
- Application on data sent to the platform

Instructors:
- **Mr. Peter WANG**, G&S Intelligent Technology Co.
  Mr. Wang has been working in Intelligent Control field about 10 years. He holds a Master in Control Science and Engineering. His academic paper “A methodology for implementing the CPAC approach to path tracking with Six-DOF robotic manipulators” was published in “2008 IEEE International Conference on Robotics and Biomimetics” as the nominate of best paper. He was also involved in the drafting of IEEE 61131-3 PLC Open Motion Control Standard and several national key projects like “863 Science and Technology Plan” of Ministry of Science and Technology.
- **Mr. Mars LIANG**, Googol Technology
  Mr. Liang has been working in Cloud Computing field about 10 years. He holds a Bachelor in Applied Mathematics. He is a Cisco-certified senior network engineer. His projects cover Reconstitute Traditional ERP System through Cloud Computing, Googol Industrial Cloud Platform, etc.

<table>
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<tr>
<th>Medium of Instruction</th>
<th>Mainly in <strong>English</strong>, with Mandarin as a supplementary tool (Course materials in English)</th>
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<tbody>
<tr>
<td>Fee</td>
<td><strong>HK$500</strong> for FHKI Member; <strong>HK$600</strong> for Non Member (lunch and course materials fee are included)</td>
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<tr>
<td>Registration</td>
<td>Please sign up at <a href="http://fhki.org.hk">FHKI Website</a>, or Scan the QR Code with smartphones</td>
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</table>
| Enquiry               | Ms Agnes Cheng (Tel: 2732 3171; email: agnes.cheng@fhki.org.hk)  
Ms Bowie Ng (Tel: 2732 3109; email: bowie.ng@fhki.org.hk)  
For further information about HKATC, please visit [http://hkatc.industryhk.org.cn](http://hkatc.industryhk.org.cn) |

To review more information of HKATC Training Courses, please click here for details

HKATC Secretariat