SenseDev'16—The 2nd Summer School on Practical Wireless Sensor Networks development Sponsored by the British Council

March 28th—April 1st 2016, University of San Carlos, Cebu, Philippines

SenseDev'16 offers the opportunity to learn from leading researchers in Wireless Sensor Network's (WSNs) and the Internet of Things (IoT) domains. The school will combine lectures on fundamental and applied aspects of WSNs with hands-on tutorials, providing the participants with a solid understanding and experience to anchor their research in this field. The SenseDev'16 summer school is aimed at post-graduate students, PhD students, and young researchers from universities as well as industry.

The course provides the unique opportunity of learning from experts in the field from Cogent Labs a world leading applied research group based at Coventry University, UK. During the course participants will:

- Understand the latest results, trends, activities and applications in the IoT and WSN domains.
- Understand the development of sensing systems from concept through to deployment.
- Understand the importance of deployments and field-work, along with associated challenges.
- Understand why simulation is important, and be able to implement simulations of WSNs in OMNET++.
- Gain the techniques and hands-on skills required to implement and deploy WSN systems, using TinyOS and TelosB nodes.
- Produce and showcase a WSN demonstrator using the skills taught throughout the course.
- Network with established researchers and make new contracts with your peer group.
- Have fun and enjoy the island of Cebu whilst acquiring new skills in your research domain.

PROGRAM

The summer school has a 5-day programme held at the University of San Carlos and will feature a number of activities involving both lectures and hands on tutorials. The taught program is as follows:

Day 1---WSN applications and design for deployment
Prof. Elena Gaura, Dr. James Brusey, and Dr. Ross Wilkins will describe the current state of WSN research, relevant applications for WSNs, and the process and challenges of going from system concept through to real-life WSN deployment.

Day 2---WSN Simulation using OMNET++
Dr. James Brusey will provide hands on tutorials on how to simulate WSNs using OMNET++.

Day 3--- WSN practical development using TinyOS
Dr James Brusey, and Dr Ross Wilkins will be involved in delivering tutorials on development with TelosB nodes and TinyOS, at the end of the session participants will know how to develop a fully-fledged WSN.

Day 4--- WSN practical development using TinyOS and Field
The day will start with a continuation of Day 3, with hands on tutorial work. In the afternoon you will visit a mango-processing factory to visit a live WSN deployment developed jointly by Coventry University and University of San Carlos. Dr Ross Wilkins will describe the system, what went in to designing it, and how the WSN is helping the factory.

Day 5--- Demo day
> In groups students will have the chance to put into practice the skills and techniques learned through out the course to build their own WSN demos. The day culminating in an afternoon session where you will be showcasing your work

For Philippine students, SenseDev'16 can be credited for 3 units in Philippine universities with graduate engineering degrees upon submission of assessment requirements. The course needs to be enrolled in the University of San Carlos with matriculation fees on top of registration. Please contact Isabelo Rabuya for information.

PRE-REQUISITES

Participants are expected to have completed an undergraduate degree in computer science, or electrical/electronics engineering, or have relevant practical industrial knowledge. Participants are expected to have a working knowledge of programing, desirably in C.

REGISTRATION and COSTS

Participation is open to interested MSC and PhD students as well as industry professionals new to the field. It is expected that the school will host a total of 60 participants from all over the world.

For Philippine students: The registration fee is 7500 Philippines peso.
For International students: The registration fee is 9000 Philippines peso (£125; €178; $190).

The course fees include participation at all school activities, school material, and refreshments during the course. The price also includes admission to the welcome dinner, and transportation for the field trip on Day 4. A city tour can be arranged during the week at an additional cost.

Accommodation can be sourced by the hosts (participants will self-pay) situated at the University of San Carlos, or hotels in the near by area can be suggested.

APPLICATION PROCESS

To apply for a position at the summer school send your CV along with a cover letter stating your motivation for attendance to the relevant contact:

International applicants please contact: summerschool.uni@coventry.ac.uk
Philippines applicants please contact: Isabelo Rabuya (iarabuya@gmail.com)

BRITISH COUNCIL SPONSORSHIP

This workshop is being delivered as part of a Newton Fund Institutional Links project between Coventry University and the University of San Carlos. The Newton Fund is part of the UK's official development assistance programme. The fund is £75 million each year from 2014 for five years. Through the Newton Fund, the UK will use its strength in research and innovation to promote economic development and social welfare of partner countries. By working together on research and innovation projects, the UK will build strong and sustainable relationships with partner countries. This will support the continued excellence of UK research and innovation to unlock opportunities for wider collaboration and trade.

IMPORTANT DATES

Application deadline: January 4th, 2016
Notification of admittance: January 15th, 2016
Registration Deadline: February 12th, 2016