

Post-Event Report (CASS Outreach Initiative ID #1254) - 2015

1. The title of the activity

Graduate Students Workshop on Circuits, Systems and Signal Processing (Arduino)

2. Name of Proposer

Dr Bah-Hwee Gwee (ebhgwee@ntu.edu.sg) and Dr Kwen-Siong Chong (kschong@ntu.edu.sg)

3. Total Number of Participants

110 CAS members and new members (on average 55 participants for each organized sub-event)

4. Cost

No		Amount (US\$)
	Arduino Workshop for Graduate Students	
1	Breakfast + Lunch Buffet + Tea Buffet (SGD\$728)	520.00
2	New IEEE Student/CASS Membership (Student Participant x 25, US\$38 each)	950.00
3	Honorarium for the Instructors (Instructor x 4, US\$200 each)	800.00
4	Workshop materials (Arduino Boards) (S\$1221.38)	872.41
	Social Event	
1	Tickets (SGD\$1519)	1085.00
2	Food and drink (SGD\$243.18)	173.70
	Total	4401.11

* Exchange rate: 1US\$ = SGD\$1.4

5. A brief description of the activity (Max 1-page)

Organizer: IEEE Circuits and Systems Society, Singapore Chapter
Sponsor: IEEE Circuits and Systems Society (CASS Outreach Initiative)
Date: 29 September, and 10 October 2015
Venue: IC Design II Lab, School of Electrical and Electronic Engineering @ Nanyang Technological University (NTU) & River Safari Singapore

IEEE Circuits and Systems Society (CASS), Singapore Chapter, conducted a series of events to promote the IEEE CASS under the CASS Outreach Initiative 2015.

1. A Full-day Graduate Students Workshop on Circuits, Systems and Signal Processing (Arduino), comprising Lectures and Hand-on Sessions for Electrical and Electronic Graduate Students and Engineers, was held on 29 Sep 2015 from 9.00am to 4.30pm at IC Design Lab II, School of EEE in Nanyang Technological University.

The Workshop on “Design and Implementation of Arduino Electronic Prototyping Board for Real World Applications” was organized to provide theoretical background and hand-on training to the participants on design and implementation of Arduino Electronic Prototyping Boards. Five sub-sessions (1 lecture presentation, 3 hands-on sessions, and 1 industry talk) were conducted. The topics included the following:

- *Introduction to Arduino - Fundamentals, Complexity and Performance Considerations*
- *Basic Hands-on Exercise: Onboard and External LED Display Controller Design*
- *Advanced Exercise 1: Temperature Sensor*
- *Advanced Exercise 2: Temperature Alarm System*
- *Industry Talk (Infinite Career Prospect for Electrical and Electronic Engineer)*

A Full-day Graduate Student Workshop on Arduino was organized to create a forum for graduate students and junior engineers from Singapore universities to learn and implement the Arduino Electronic Prototyping Board for different applications, exchange their ideas on design, implementation and problem solving skills, and to provide a networking session for students and professors in Singapore. More than 100 registered for the workshop but due to the space constraints 45 graduate students and junior engineers attended workshop. 25 free IEEE/CASS memberships were given to the student speakers and some student participants.

2. A social event to visit to River Safari was organized on 10 Oct 2015, from 9.30am to 1.30 pm. 35 members and their families visited the River Safari and taken the boat rides.



The Arduino (Instructors and participants)



Social Event (with participants)