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# REPORT

## Introduction to Engineering and Robotics: Robotic Workshop @ SMK Damansara Jaya

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Organized by:  
USM IEEE Student Branch

Sponsored by:  
IEEE CAS Malaysia

**Introduction to Engineering and Robotics:**Robotic Workshop @ SMK Damansara Jaya

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Academic Year	:	2012/2013
Date	:	02 August 2013 (Friday)
Time	:	12.30 pm to 2.45 pm
Venue	:	SMK Damansara Jaya, Selangor.
Participants	:	13 students
Organised by	:	USM IEEE Student Branch
Sponsored by	:	IEEE CAS Malaysia

**1.0 Report**

SMK Damansara Jaya was the third school USM IEEE Student Branch conducted the introductory robotic workshop. From the feedback we obtain from our past two school which participated in our project (SMK Paya Keladi and SMJK Chung Hwa Confucian), we received a very clear message that this project actually benefit students and help then bridge the gap between their theoretical study with the practical world. Hence, this time USM IEEE Student Branch had decided to organise the robotic workshop once again and this time we head towards a secondary school located in Selangor, SMK Damansara Jaya. Same as usual, this programme had obtained the endorsement from PPN Petaling Jaya and the equipment was sponsored by CAS society. Mr Yong Bang Ming was the organizing chairman together with Dr. Mohd Tafir bin Mustaffa and Dr. Rosmiwatibt Mohd Mokhtar as the project advisor of this robotic workshop.

The workshop started at 2.30pm with some briefing on Robot building by Yong Bang Ming followed by the hands-on. Within the 3 hours of activity, all the participating student were able to finish all the hands-on task as given. Some student even able to think of some creative approach to complete the given task. Overall, the student feel excited and enjoyed the learning process all along the workshop.

**2.0 Program**

Time	Event
12.00pm - 12.30pm	- arrive at SMK Damansara Jaya, setting up the workshop.
12.30pm – 12.50pm	Theory and briefing on Robot Building
12.50pm - 2.30pm	Robot building hands-on
2.30pm - 2.45pm	Mini Demonstration by students
2.45pm - 2.50pm	Souvenirs and photo session
3.00pm	Program End

### **3.0 Organizing Committees**

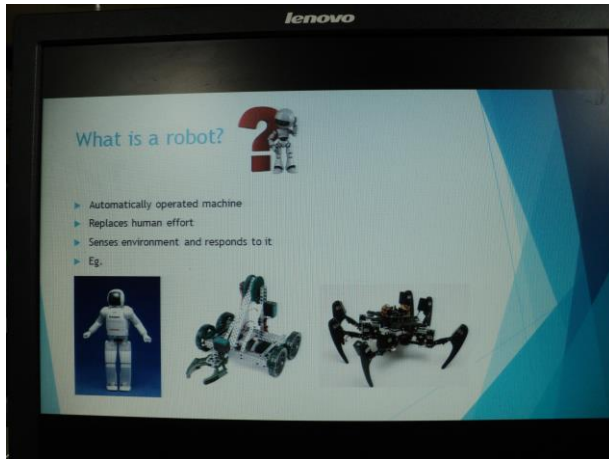
Counselor	:	Dr Rosmiwati Mohd Mokhtar
Project Manager	:	Yong Bang Ming
Program Coordinator	:	Yeoh Hong Boon
Committee	:	Ooi Heivin Chong Xin Rou Kwong Ming You Lee Zi Xian Ooi Shen Ling Chong Xin Rou Lim Hoe Teng Soong Xin Ern Chaw Mun Jun Andy Tan Wei Keat

### **4.0 Outcome**

From the workshop, the students able to think of some creative alternative methods in solving the given hands-on task and they actually take on the initiative to try write the code themselves. This workshop was not only able to demonstrate the potential creativity of the students, but also succeeded in improving student in the aspect of knowledge gain, communication skill, working as a group, presentation skill etc. Thus, the objective to expose students with knowledge in robotics and develop interest to electrical and electronic engineering field was achieved.

## 5.0 Event Highlights





## 6.0 Appendix

BENGKEL ROBOTIK ANJURAN IEEE USM DAN KELAB ROBOTIK SMKDJ  
(ADUINO ROBOTICS WORKSHOP ORGANIZED BY IEEE USM AND  
ROBOTICS CLUB OF SMKDJ SELANGOR)

VENUE: MAKMAL ICTL ONE

COMMENTS: BY TEACHER IN CHARGE PN HOR KAH YEE

Overall the course is an eye opener for the students.  
The students were very interested and intrigued by the ability to build a simple robot using the aduino set.

A total of 13 students participated in the workshop from 1230 to 245pm on 2nd August. The students enjoyed themselves tremendously as they manage to learn the hand on process of building using the Aduino,transistors and making their led blink simultaneously or alternately using their own creativity.

This workshop exposed the students to first time using simple C++ language. We would like to thank Mr Yong Bang Ming and USM for this joint venture in instilling the passion for robotics in our students.

Thanks.

Yours sincerely,



Pn Hor Kah Yee



## PEJABAT PELAJARAN DAERAH PETALING UTAMA

BLOK PODIUM, KOMPLEKS KELANA CENTRE POINT, JALAN SS 7/19, KELANA JAYA,  
47301 PETALING JAYA, SELANGOR DARUL EHSAN



**“1 MALAYSIA : RAKYAT DIDAHULUKAN, PENCAPAIAN DIUTAMAKAN”**

Ruj. Kami : PPDPU.PK.KOR 800-2/4/2/2 ( )  
Tarikh : 16 JULAI 2013  
(bersamaan 7 Ramadhan 1433H)

IEEE Advancing Technology,  
Pusat Pengajian Kejuruteraan Elektrik Dan Elektronik  
Universiti Sains Malaysia.

Tuan,

### BENGKEL ROBOTIK DI SMK DAMANSARA JAYA

Dengan segala hormatnya perkara ini adalah merujuk surat tuan bertarikh 5 Julai 2013.

2. Untuk makluman tuan, pihak PPD Petaling Utama tiada halangan untuk membenarkan program tersebut dijalankan di sekolah tuan. Walau bagaimanapun perkara-perkara berikut perlu diberi perhatian :

- 2.1 Penyertaan guru dan murid adalah secara sukarela, tanpa sebarang unsur paksaan.
- 2.2 Penyertaan murid hendaklah mendapat kebenaran ibu, bapa dan penjaga.
- 2.3 Pelepasan guru dan murid tidak akan menjejaskan proses pembelajaran dan pengajaran di sekolah.
- 2.4 Guru terlibat tidak layak membuat tuntutan perjalanan / perbelanjaan berkaitan program.
- 2.6 Pihak penganjur hendaklah bertanggungjawab atas kebajikan dan keselamatan guru serta murid di sepanjang program berlangsung.
- 2.8 Yuran penyertaan (sekiranya ada) hendaklah mendapat kelulusan JPN / PPD.

3. Pihak tuan diminta untuk berhubung dengan pihak sekolah yang terlibat untuk mendapatkan kerjasama melaksanakan program ini. Sebarang pertanyaan dan maklumbalas, sila hubungi pegawai meja yang bertanggungjawab iaitu **Puan Ardiana binti Aziz di talian 03-7883 4649**. Segala kerjasama dan keprihatinan tuan dalam perkara ini amatlah kami hargai dan didahului dengan ucapan terima kasih.

Sekian, terima kasih.

**“BERKHIDMAT UNTUK NEGARA”**

Saya yang menurut perintah.

(HJ. ABU OMAR BIN MGS)  
Timbalan Pegawai Pelajaran Daerah  
Pejabat Pelajaran Daerah Petaling Utama



(Sila catatkan nombor rujukan apabila berurusan dengan kami)

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## **7.0 Conclusion**

Overall, the activity was a veritable successful with the school administrations and students giving praise and good feedbacks on the event. This will become a good drive for the USM IEEE Student Branch to have more of such event in the future.

Prepared by,

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Yeoh Hong Boon,

Secretary

USM IEEE Student Branch

USM Engineering Campus.