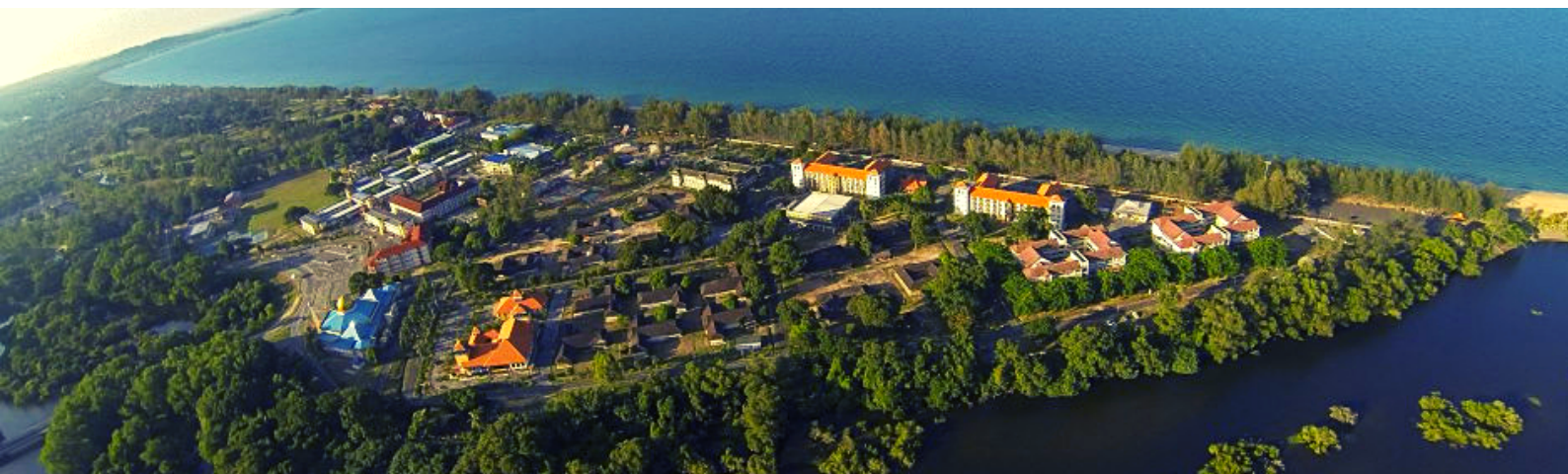


EETECH NEWS

Faculty of Electrical Engineering
UiTM Terengganu Branch Dungun Campus



INTERNATIONAL EUREKA INNOVATION EXHIBITION (I-EIE) 2018

Written by Siti Sara Rais

Programme : International EUREKA Innovation Exhibition (i-EIE) 2018
Date : 30 - 31 October 2018
Venue : Mutipurpose Hall, Universiti Kuala Lumpur Malaysian Spanish Institute (UnikL MSI) Kulim Hi-Tech, Kedah
Organizer : Universiti Kuala Lumpur Malaysian Spanish Institute (UnikL MSI)
Student Programme Leader : Mohamad Azwan bin Hamezah
Advisor/Ascort Lecturer : Mrs Siti Sara Binti Rais

Participation in this competition is from various institutions including polytechnics, community colleges, skills institutions, UiTM various campuses, IPTAs and IPTS as well as international participation from Indonesia. There are two (2) main categories contested, namely school level and professional/higher education level. The school-level competed on 29/10/2018 while professional and higher education levels on 30/10/2018. A total of 200 projects participated at i-EIE 2018 comprising professional and tertiary education. In the category of professional and higher education, there are four categories of awards, namely Chapter A, covering the areas of Electricity & Electronic, ICT, Multimedia and Telecommunications, Chapter B Manufacturing Process, Machines & Equipment, Automotive, Transportation & Industrial Design, Chapter C Environmental Protection, Renewable Energy, Biomedical Engineering and Chapter D Others (ex: Building, Construction & Materials, Social Science, Quality and Continuous Improvement, Educational Teaching & Training, etc.). List of the winners can be viewed at the website i-EIE 2018; <https://www.msi.unikl.edu.my/eureka/>.

WHAT'S INSIDE THIS ISSUE:

International Eureka Innovation Exhibition (i-EIE) 2018 - 1

Bored of using whatsapp? Get A Pushbullet - 2

Engineers are potential Terrorists? - 3

MOOC Circuit Team - 4

The Revised Version of IPV4 Subnetting - 5

Clinic Day EPO359 - 6

International Creative Design Competition (ICDC 2018) - 7

Table 1

Team members	FYP Title	Competition Title	Award / Medal	Supervisors
Tun Khairin Aiman bin Tun Mohd Khairi Nur Syafikah Najiha binti Mohd Hanafi Nur Syamim Athirah binti Zulkiffi	IoT-based switching system	Hybrid-Powered IoT-based Switching System	Silver	Main Sv: Mrs Siti Sara Rais Co-supervisor: Ms Nur Idawati Md Enzai
Mohamad Azwan Bin Hamezah Ahmad Fakhri Hakim B Mat Daud Mohd Fahmi Bin Mohd Noor	Alternative power supply			



Bored of using whatsapp? Get A Pushbullet!

Written by Norizan Ahmed & Nurhaffizah Hassan

If Whatsapp can offer you the best chat app ever, then so can Pushbullet! Whatsapp may have amazing features, tips and tricks you could possibly want but believe me, Pushbullet has its own extension of features you might not know about.

You cannot make a comparison between nurse and engineer, but as for Whatsapp and Pushbullet, the comparison can get really interesting. No line needs to be drawn. Both are free apps. Just download it and enjoy those awesome features! Experience it yourself!

Reference:

www.pushbullet.com

“

Pushbullet connects your devices, making them feel like one

- No need to check your phone when you can send and receive texts on your desktop.

Send Text Message



- Pushbullet gives you all in one notifications. Whatsapp message, texts, phone calls and more.

Push Notifications on Your Desktop



- A simple way to share links between any of your devices. You may send it straight away and never email yourself a link again.

Send links



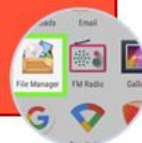
- Chitter-chatter or gossiping in Pushbullet with friends more convenient than ever.

Chat With Friends



- Transfer big files has never been easy with Whatsapp. Now that you have the bullet, just push it and enjoy.

Transfer files easily



- Get notified about things you care about. A new updates, new free games from EA, Google acquisitions, and more.

Get Engaged to Interesting Things



ENGINEERS ARE POTENTIAL TERRORISTS?

Written by Nur Idawati Md Enzai

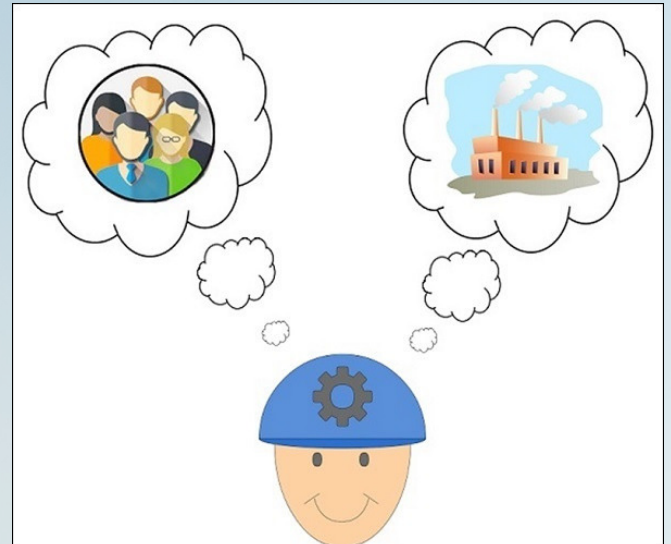
After 9-11 tragedy, Muslims have always been associated with terrorism especially in the western media. Their Islamic faith has been put to blame even though there are also cases involving terrorists from other religions. But another pattern also emerged instead of religion factor: most of them have science and engineering educational background.

According to research by Gambetta, a renowned sociologist at the European University Institute in Italy, and Steffen Hertog, an associate professor at the London School of Economics, more than twice as many members of violent Islamist organisations have engineering degrees as have degrees in Islamic studies. Another possible factor especially for those who hail from Middle Eastern and North African countries as well as from migrant communities, people with engineering backgrounds encounter tougher experience in getting stable jobs due to economic and political situations [1].

Based on studies conducted on more than 4,000 political radicals operating across the Muslim world and in the West in reference [2], engineers have been found to be dominating every jihadist group worldwide. Sharing the same observation as [1], the surplus of graduates in countries compared to small demands of labour could lead to frustration.

Some of the examples of terrorists with engineering background such as in February 2010, Joseph Andrew Stack, a software engineer, crashed his plane into I.R.S. offices in Austin, Tex. The following month, John Patrick Bedell, an engineering grad student, opened fire at an entrance to the Pentagon. In early May 2010, Faisal Shahzad (bachelor of science in computer science and engineering) was arrested at Kennedy Airport for a failed attempt to set off a bomb in Times Square. In the same month, Faiz Mohammad, a civil engineer, was caught at Karachi's airport with batteries and an electrical circuit hidden in his shoes. And list goes on for the coming years, not confined to Middle Easterners and Muslims. Gambetta and Hertog pointed out the possible reason is that: engineers tend to have combined emotional conservatism and intellectual habits [3].

On the other hand, Martin Rose, the British Council's senior consultant on the Middle East and North Africa, concluded that science education fails to inculcate critical thinking the way arts teaching do. Typically their minds only search for right and wrong namely in binary. Therefore the engineering students are more susceptible to be recruited by the terrorists [4].



However, most works mentioned above were done by non-Muslims. We believe that the Muslims themselves should play the role to revise the methods of teaching Islamic knowledge to curb the problem of terrorism. Though the contents are adequate, the problem lies in internalizing the true Islamic teachings. Rather than blindly memorising and totally accepting without intellectual discourse, the Muslim students should be allowed to question and discuss so that logical reasoning could take place in their life decision makings. Incorporating Islamic values in the engineering curriculum could also be beneficial for them to balance between the worldly and religious knowledge, thus reducing the inclination towards radicalism.

References

- [1] https://www.washingtonpost.com/news/monkey-cage/wp/2015/11/17/this-is-the-group-thats-surprisingly-prone-to-violent-extremism/?noredirect=on&utm_term=.d11e685a9b08
- [2] <https://www.foreignaffairs.com/articles/2016-03-10/uncivil-engineers>
- [3] <https://www.nytimes.com/2010/09/12/magazine/12FOB-IdeaLab-t.html>
- [4] <https://www.theguardian.com/commentisfree/2015/dec/03/scientists-easy-prey-jihadis-terrorists-engineering-mindset>

MOOC CIRCUIT TEAM

Written by Nuraiza Ismail, Mohamad Taib Miskon, Fatimah Nur Mohd Redzwan, Nur Syahirah Kamarozaman, Suziana Omar & Suziyani Rohafauzi

AWARDS & RECOGNITIONS	
Competition name	Award
UniSZa Carnival on e-Learning 2018 (UniCel 2018)	GOLD
Educational, Innovation, Creativity & Design Competition (EICD 2018)	GOLD
National e-Content Development Competition (eConDev 2018)	GOLD
Digitized International Invention Innovation and Design Competition Johor 2018	SILVER
Kelantan International Learning & Innovation Exhibition (KILIEx 2018)	SILVER
COPYRIGHT (Application Number : LY2018002460)	
Certificate of Achievement : Electric Circuit I (EEE121) from iNeD, UiTM	
Certificate of Achievement : Electric Circuit II (EEE231) from iNeD, UiTM	
Listed in OpenLearning Marketplace	
PUBLICATIONS	
Innovative Educational Methods of Circuit Theory Utilizing MOOC, <i>Kelantan International Learning & Innovation Exhibition (KILIEx 2018)</i>	
Engaging Online Learning Platform of Electric Circuit through MOOC, <i>UniSZa Carnival on e-Learning 2018 (UniCel 2018)</i>	
Enhancing Learning Experience in Electric Circuit through MOOC, <i>International Conference and Competition on Teaching and Learning (i-Telearn)</i>	
GROUP MEMBERS	
Nuraiza binti Ismail (Leader)	
Mohamad Taib bin Miskon	
Fatimah Nur binti Mohd Redzwan	
Nur Syahirah binti Kamarozaman	
Suziana binti Omar	
Suziyani binti Rohafauzi	

“A CLEAR VISION,
BACKED BY
DEFINITE PLANS,
GIVES YOU A
TREMENDOUS
FEELING OF
CONFIDENCE AND
PERSONAL POWER.”
– BRIAN TRACY



THE REVISED VERSION OF IPV4 SUBNETTING

Written by Siti Sara Rais

By referring to EE Tech News volume 9 December 2015 in page 3 or the link <http://eetechnews.blogspot.com/2015/11/ipv4-subnetting.html>, the revised version of the rules of borrowing bits from host portion to create subnet ID is between 1 bit to the maximum host bit. It means that if we borrow the host portion in Class A, the maximum bit is 24 bit while class B and C are 16 and 8 bit respectively. If the maximum host portion is borrowed to create subnetting, there is no host at all. The revised version is implemented in order to fully utilise the IPv4.

IPv4 size is 32-bit and it is represented as X.X.X.X which X comprises 8-bit (1 octet). In Cisco examinations, you are not allowed to use the calculator. Thus, it is important for you to remember the value of each of the binary-to-decimal conversion and the IPv4 classes. Table 1 shows the value that you should remember. Table 2 shows the usage of IPv4 including the reserved IP address. Multicast IP address such as 224.0.0.5 is used for server OSPF for the Whatsapp Group. Class E IPv4 is for research purposes which mostly used by USA universities.

Table 1

Binary in 1 octet	1	1	1	1	1	1	1	1
	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
	128	64	32	16	8	4	2	1
IPv4 classes	A 00000000 01111111	B 10000000 10111111	C 11000000 11011111	D 11100000 11101111	E 11110000 11111111			
First octet for final classes	128	192	224	240	248	252	254	255
Range of Use	1-126	128-191	192-223	224-239				

Table 2

A	B	C	D	E
1.0.0.0 => 126.255.255.255	128.0.0.0 => 191.255.255.255	192.0.0.0 => 223.255.255.255	224.0.0.0 => 239.255.255.255	240.0.0.0 => 254.255.255.255
Internet			Multicast	Research purposes
10.0.0.0 => =>10.255.255.255	172.16.0.0 => 172.31.255.255	192.168.0.0 => 192.168.255.255		
Private addressing				
Reserve IP Address				
127.0.0.0 => 127.255.255.255				
Reserve for loopback testing				
0.0.0.0 => 0.255.255.255				
Default route and wildcard mask				
	169.24.0.0 => 169.254.255.255			
	APIPA Automated Private Address			
				255.0.0.0 => 255.255.255.255
				Broadcast and Subnet mask

CLINIC DAY FOR POWER ELECTRONIC COURSE (EPO359)

Written by Haslizamri Md Shariff, Mohd Azri Abdul Razak & Mohd Izzat Mod Ariffin

Pada 26 Oktober 2018, Clinic Day For Power Electronic (EPO359) telah diadakan bertempat di Dewan Cemara UITM Kampus Dungun. Semua pelajar EE yang mengambil kursus ini pada semester semasa diwajibkan hadir. Kehadiran sangat baik dimana 90 peratus kehadiran pelajar telah dicatatkan.

Clinic Day ini telah diketuai oleh Encik Azri dan dibantu oleh dua orang fasilitator iaitu Encik Haslizamri dan Encik Mohd Izzat. Sesi Clinic Day For Power Electronic telah bermula seawal jam 8.30 pagi. Pelajar hadir dan diberi taklimat oleh Koordinator Kursus iaitu Encik Mohd Azri bin Abd Razak. Seterusnya, pelajar dipecahkan kepada 10 kumpulan bagi melaksanakan Latihan Dalam Kumpulan (LDK). Soalan-soalanyang berlainan bagi bab 1, 2 dan 3 diberi kepada setiap kumpulan. Seterusnya, pelajar dikehendaki berbincang didalam kumpulan dan semua soalan tersebut akan disemak oleh fasilitator yang bertugas.

Soalan-soalan yang telah disemak dan disahkan betul akan dikumpulkan bagi tujuan perkongsian kepada semua pelajar. Semasa sesi ini pelajar yang dikenali mampu membantu rakan sebaya dalam menguasai kursus EPO359, telah dipilih dan diletakkan didalam kumpulan yang ditetapkan. Proses perbincangan dan LDK sangat berkesan dimana pelajar yang lemah dibantu oleh rakan sebaya dan juga fasilitator pada hari tersebut.

Program Clinic Day 2 For Power Electronic ini akan dilaksanakan lagi pada 30 November 2018. Diharap, program seterusnya dapat memberi impak yang signifikan kepada pelajar dalam menguasai kursus ini.

“

Don't stop when you're tired. STOP when you are DONE.



International Creative Design Competition (ICDC) 2018

Written by Siti Sara Rais

Tajuk Program/Projek : International Creative Design Competition (ICDC) 2018

Tarikh Pelaksanaan : 29 dan 30 Oktober 2018

Tempat : Dewan Seri Iskandar, Universiti

Teknologi MARA Cawangan Perak Kampus Seri Iskandar

Penganjur : Persatuan Alumni UiTM

Cawangan Perak

Ketua Program Pelajar : Syahmi Lukman Bin Saiffuddin

Penasihat : Puan Siti Sara Binti Rais

Pensyarah Pengiring : Encik Mohamad Taib Bin Miskon



Sebanyak 4 projek yang telah dibimbing oleh dua orang penyelia telah dipertandingkan di ICDC 2018. Jadual 1 adalah senarai peserta beserta tajuk projek dan projek yang dimenangi. Penyertaan pertandingan ini disertai daripada pelbagai institusi termasuk politeknik, kolej komuniti dan UiTM pelbagai kampus. Terdapat tiga (3) kategori yang dipertandingkan iaitu Kategori A Professional Designer, Kategori B Young Designer dan Kategori C Junior Inventor di mana bagi kategori A dan B mempunyai tiga (3) tema berbeza iaitu Art and Design, Computing and IT dan Built Environment. Sebanyak 96 pasukan yang bertanding bagi semua kategori. e-abstract boleh dilayari melalui <https://2018icdc.wixsite.com/icdc2018/e-abstract>.

Jadual 1

Nama peserta (pasukan)	Tajuk	Pingat / Anugerah	Penyelia
Muhamad Ikhwan Bin Rosli (2016638496) Muhamad Azrin Bin Zulkifli (2016494024) Fahmi Null Aiman Bin Zurkanian (2016638432)	IoT Locking Door	Silver	Nuraiza Binti Ismail
Syahmi Lukman Bin Saiffuddin (2016493768) Syed Mohammad Shahrul Fikri Bin Syed Mohd (2016638518)	Waving Sensoring Dustbin	Gold	
Muhammad Syafiq Bin Rosle (2016638724) Muhammad Haziq Bin Hasry (2016493468) Amar Danial Bin Adlan Hidayah (2016638186)	MIPO - Multi Integrated Voice Controlled Power Outlet	Bronze	Mohamad Taib Miskon
Muhammad Haziq bin Nor Azli (2016493798) Muhammad Haziq bin Azhar (2016638732) Muhammad Amirun Shahmi bin Roshdi (2016493544)	Lighting Fixture with Customizes Automation Control	Gold Best of the best young designer – diamond award	



Editorial Board

PATRONS :
Assoc. Prof. Dr. Hj. Abdol Samad Nawi
Assoc. Prof.. Dr. Khlipah Ibrahim

ADVISOR :
Ir. Dr. Zulzilawati Jusoh

CHIEF EDITOR:
Nur Idawati Md Enzai

LAYOUT & GRAPHIC DESIGN :
Dayana Kamaruzaman
Fatimah Nur Mohd Redzwan

EDITORS:
Mazratul Firdaus Mohd Zin
Nurbaiti Wahid
Syila Izawana Ismail