IEEE SEM 1/17'

NEWSLETTER

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YOUNG INNOVATORS CHALLENGE

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Greeting Notes

by Dr. Lenin Gopal

The Institute of Electrical and Electronic Engineers (IEEE) was founded in 1884 by Alexander Graham Bell and Thomas Edison among its charter members. Today, IEEE serves over 400,000 members worldwide. Over 100,000 Students and Graduate Student members worldwide make up 25% of the membership of IEEE and are essential to its continued growth and vitality. Not only is IEEE the world's largest technical and professional society, it also publishes a significant amount of the electrical engineering and computer-science literature in the world.

The subsection of the IEEE, IEEE Student Branches open the door to opportunities that will help you develop your professional identity in IEEE's designated fields of interest: sciences, technology, engineering, and mathematics (STEM). In addition, you'll make global connections with people who can help you along your targeted career path through IEEE's international community of members and volunteers.

In line with IEEE's vision, IEEE Curtin Sarawak Student Branch actively involves in the community outreach and students skill development programmes. In Semester 1, 2017, the IEEE Curtin Sarawak Student Branch carried out Solar Technical Workshop & Construction of Solar Lamp, Arduino Workshop, Keysight Technical Workshop, and Young Innovators Challenge Booth camp. For supporting the Miri community, the IEEE Curtin Sarawak Student Branch organized E-waste collection drive. IEEE Curtin Sarawak student branch has initiated a community outreach project, called Light Up Miri. Through the project, the student's branch planned to distribute solar powered LED lamp to the rural and suburban peoples of northern Sarawak. In addition to that the IEEE Curtin Sarawak student branch is supporting the Electrical and Computer Engineering (ECE) department by organizing the industry visits in every semester. In line with the Malaysia vision and mission, the IEEE Curtin Sarawak student branch organized the IEEE Digital Maker Expo 2017 in collaboration with MDeC. During the Expo, a digital maker space is set up in Curtin University for young innovators to create and make their products with the accessibility to lab facilities and measuring tools. These activities reignite the student's passion in engagement with engineering and technologies.

On behalf of the Electrical and computer Engineering department, it is a great pleasure to congratulate the IEEE Curtin Sarawak student branch for winning the IEEE Outstanding Student Branch Award 2016 by outperforming the 20 other Malaysian IEEE student branches and it is not a simple task to achieve this great milestone. Once again, my appreciation goes to all IEEE Curtin Sarawak members and advisors for putting so much hard work and enthusiasm into organizing so many amazing events.

Best Regards,
Dr. Lenin Gopal

IEEE AGM MALAYSIA

On the 31 st January 2017, The Institute of Electrical and Electronic Engineers (IEEE) Student Branch of Curtin University, Malaysia (Curtin Malaysia) bested over 20 other Malaysian IEEE student branches to win the IEEE Outstanding Student Branch Award 2016 at the recent annual general meeting (AGM) of the IEEE Malaysia Section held in Shah Alam recently.

Curtin Malaysia alumnus and former president (2014) of the student branch, Saaveethya Sivakumar, also received the Outstanding Woman in Engineering (WIE) Volunteer Award 2016. Saaveethya's most significant contributions to IEEE include being the Chair and Founder of WIE Student Network Malaysia, Malaysia Section; member of the Promotion Team of the R10 WIE Supporting Volunteer Committee, Region 10; and Secretary of Women in Leadership Subcommittee of WIE Global. She said it is a great honour to receive the volunteer award and that it has motivated her to strive harder to achieve her goals in the betterment of women in engineering.

Commenting on the Outstanding Student Branch Award, meanwhile, current President and fourth-year electrical power engineering student Kong Sheng How said the student branch has given him a good platform to demonstrate his leadership skills. "I am proud to head the student branch under the supervision of our advisor, Dr. Garenth Lim. This is our first outstanding student branch award from the IEEE Malaysia section and definitely spurs our committee members to do even better in the future," Kong said. Dr. Lim, who was elected to the committee of the IEEE Engineering in Medicine and Biology society (EMBS) during the AGM, remarked that the Curtin Malaysia IEEE Student Branch allows students to learn independently, lead profoundly and create impact in the community with their knowledge. The Curtin Malaysia IEEE Student Branch was established in 2008 and currently has about 120 members.

INTERACTIVE ACTIVITIES

TEAM BUILDING

Charles Kettering once said "If you want to kill any idea in the world, get a committee working on it". With that said, it is essential for a committee to get to know each other in order to work towards success. On a sunny 18th March 2017 afternoon, from 1pm to 4pm, a team building session was conducted among all of the committee of the Curtin Sarawak IEEE Branch. The main purpose of this event was to inculcate teamwork among every committee member to strengthen the bond and sharpen our knowledge on the society itself. The event was conducted by our very own Treasurer Ng Kay Li and her vice Treasurer Han Kit Siew. In the very beginning of the event, ice breaking session was held which required every committee member to introduce themselves and explain their roles in the society in order to reinstate their significance among every committee.

Our first game of the day tested the communication skills of the committee themselves. The game called characteristics started with the distribution of papers filled with random attributes of each committee member. Every participant were required to randomly ask questions based on the paper among one another and the matching attributes were signed. The one with the fastest records were tested again with a surprise quiz. The ones with the correct guess were announced as winners and with errors were punished.

Our next game was electricity which required us to be quick at passing the hand signals among each other and the last member of each group was required to run towards the second judge. The group with the fastest time record was called the winner. The third game of the day was human tic tac toe which tested the logical thinking and running efficiency of each member. The highlight game of the day was charades as it unmasked many hidden goofy characters of the members as they went all out acting out the random topics given for their team members to guess. Last but not least, the closure game of the day was Kahoot. A computer generated quiz regarding the trailer of an upcoming animation movie Boss Baby and on our very own society IEEE.

Winners were awarded with chocolates and the losing team were awarded with random sandwiches with weird fillings such as wasabi. The punishment was a laughing treat as the members struggled to swallow the weird sandwiches. At the end of the event, our respected advisor Dr Garenth made an appearance and introduced himself to us. A group picture was taken to conclude the event. After a productive day filled with laughter and new bonds, we called it a day with a scrumptious tea session in a nearby café called T4 SESSION. Without doubt the event was a well-organized and a memorable day to be cherished by the every committee member of 2017.

A holistic education should include developing virtuous values in students so that it will help mould them into wholesome human beings who are able to contribute and integrate well into society. Hence, the new semester marks the arrival of new faces to our great university. IEEE Curtin Sarawak SB will initiate their member recruitment drive to have new members join on our journey for the rest of the semester. Freshmans will undergo orientation programs organised by orientation leaders to prepare new students and given an overview of the complete realm of university life. IEEE Curtin Sarawak goes the extra mile by conducting a slot from the entire one week orientation. This sessions are executed for both the degree and foundation orientation week on 21th to 24th February and 20th to 24th March respectively.

The membership team lead by Loh Chang Sheng had demonstrated a slides presentation. The presentation round-ups all the exciting programs and exhilarating events that will be organised. He pointed out the major event that is the IEEE Digital Maker Expo proceeding in May. Our site visits plan has also captured many of the students attention. The team also did a great job explaining the whereabouts of the Young Innovator Challenge Miri. It was important to engage the students throughout the session. Catching and maintaining the attention of a crowd during a presentation is a tricky ordeal but the membership team have definitely mastered that skill. Next, our social networks accounts are also displayed to enable the new student to be regularly updated on the activities posted and shared online. Chang Sheng also briefs the students regarding both the membership packages available which are the local and international membership. He elaborated on the advantages that the students can enjoy once becoming a member. The team worked well in expressing their genuine welcome to the new students to Curtin Malaysia and thanked them for their time.

ORIENTATION PRESENTATION
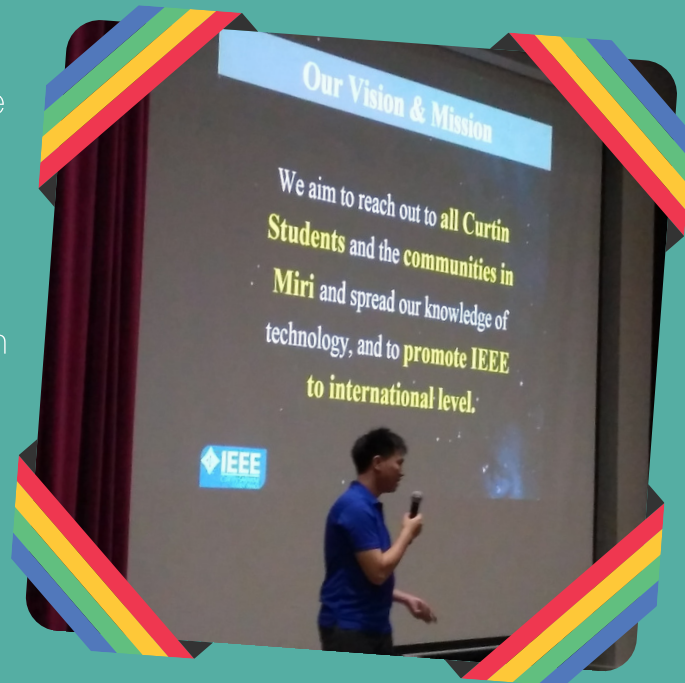
The end of March is always bustling with the beginning of club activities notably the Club carnival that is then followed by welcoming parties. Curtin Sarawak IEEE Branch was the first few clubs to kickoff the welcoming party on 31st March 2017. Sia Yew Wei, the head of publicity conducted the event along side Liong Hui Jing. About 70 members comprised by new and old members were present at SK3 103. The objectives of this welcoming party included to introduce the new and current members to each other and promote the upcoming events that will be organised.

Doors opened to members at 6pm followed by the honorable club advisors; Dr. Garenth Lim King Hann, Dr. Hendra GunawanHarno and Dr. Raymond Chiong Choo Wee.The juncture was commenced with speeches by the club advisors that attended the event. Lancelot Chong was the event's anchor who kept the crowd at their feets during the interactive game session that was specially designed to work as an icebreaker.

The first game was called 'Pass the time-bomb'. This game starts off with 2 white and 2 yellow balls thrown out to the crowd as a song plays in the background. The balls must be passed around continuously until the song is paused. Then those who possesses the balls when is song is discontinued was called up to the stage and questioned about basic informations of the members sitting around them. Players that failed to answer correctly was punished to drink the punishment drink. 3 rounds of this game was played with all the cheerful members calling out their new friends and cheering for the losers on stage.

WELCOMING PARTY

After the ice breaker, the event was proceeded to a group photo session and then dinner was served. As the members returned from having dinner, the next game was introduced. 'Reverse Charades' was played as a consequence the crowd was divided to 4 groups. A representative from each group must guess a word that the rest of the group members were trying to display by stimulating their body to exhibit each alphabet of the word. Two groups would compete and the fastest group to guess the word bags the prize. The winning groups were given token gifts. It was a ludicrous scene as eager members worked in a team to hunt out the words.

The last game followed after this game ended. 'Hold Your Breath Relay' was a whimsical game that only required straws and a thin sheet of tissue paper. The same groups were maintained throughout this game as well. The first person in the row puts the tissue paper on the end of the straw and keeps it in place by inhaling. No hands touch the tissue paper after that. Each team member runs to the line and back and must pass it to the next player.

As the members settled down after the thrilling game, a pop-quiz was realised. The attendees were questioned on the whereabouts of the upcoming events that will be organised by Curtin Sarawak IEEE Branch. At 8.45pm the event was drawn to close. The members were very appreciative and welcomed to the IEEE family.

Technical Workshops

Solar Technical workshop & Construction of Solar Lamp

Light Up Miri Workshop is a workshop on fabricating solar lamps was conducted for the local student volunteers on 6th and 7th May 2017. They learned basic electricity generation and solar power theory, and perfected their soldering skills. By the end of the workshop, they were able to fabricate solar powered lamps containing batteries that can be charged during the day. The solar lamps will be delivered to the local community to lighten up their house at night. Solar lamps were chosen because it is powered up by only solar and battery. It can last for 16 hours continuously without charging. The solar lamp is portable and detachable. Plus, local community can detach it for spare part changing and ease maintenance as the solar panel and battery are portable. In addition, a campaign of solar power awareness will be conducted during the delivery of solar lamps.
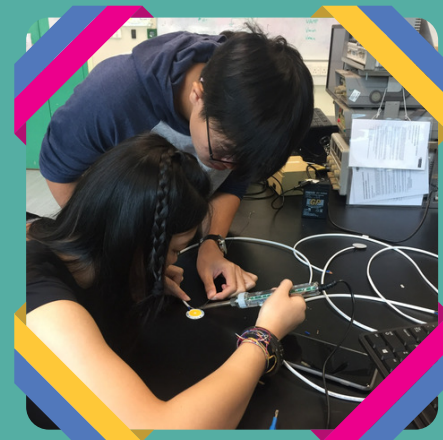
Arduino workshop

Arduino workshop will introduce basic arduino parts and programming methods for the arduino to all the participants. It is always a great turnout and participants go the extra mile to attend and learn ways to integrate them into your own Arduino robotic projects. Highlighted are speakers of the whole course that began on January 20th. The IEEE Arduino START Workshop was conducted by Han Kit Siew, Carl-Mats Isaac Bayang and Lancelot Chong at the ICT Lab 3. Moving on, Sim Zee Ang lead the students with the second Arduino workshop at the Collaborative Room 1 on 4th of March. The workshop introduced Arduino C320A's parts and programming methods to the participants which is significantly important in the engineering field. Sharing knowledge and skills is an important part of contributing to our members and doing this means the wheel doesn't have to be continually reinvented. Subsequently, Lancelot Chong was the speaker for a similar arduino workshop on 15th April at ICT Lab 3. In this workshop, the related information from the last arduino workshop was shared. To end this chain, Advanced Arduino workshop was held on 22nd April. This workshop raised the bars to what was learnt on the previous workshops. More advanced concept was practiced and the audience were students with basic knowledge of arduino. It was facilitated by Carl-Mats Isaac Bayang at Collaborative Room 1.

Keysight Technical Workshop

On the 18 th of March 2017, our club organised a Key sight workshop to expose students whom are currently majoring in Electrical and Electronic Engineering to the basic understanding of measuring instruments. The initiative was made to improvise the skills of our students and also create an interactive session outside the classroom to develop a better understanding within them.

This entire event was conducted by our very own respected president Jeff and his vice president Desmond. The approach of a younger tutor was very much created a comfortable learning environment as the participants felt more welcome and less shy to interact with their speakers

The participants were taught on how to accurately implement the functions of oscilloscopes, function generators and visual engineering environments. The knowledge of the instruments is essential for developing projects with test & measurement capabilities. The participants were also taught the basic usage of Keysight Instrument Control software which allows them to control an oscilloscope via inputs from a portable computer. The students were energetic and proactive with flooding questions and also at jotting notes. The session ended with the serving of refreshments.
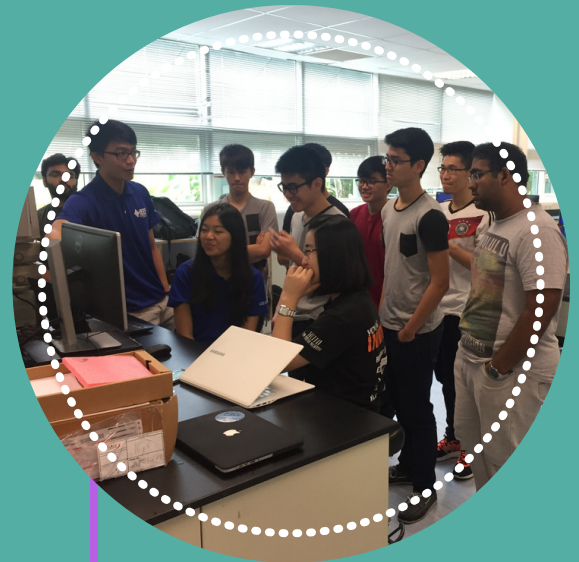
Young Innovators Challenge Boothcamp

Leadership is not about the next election, it's about the next generation. The younger generation plays a vital role in shaping the upcoming nation. With that in mind, IEEE Curtin Sarawak Branch conducted the Young Innovative Challenge booth camp. This event was aimed to prepare the student for the upcoming IEEE exhibition which is to be held in May 2017. The event was sponsored by The IEEE Curtin Sarawak Branch, Unilife, and All Abroad Young Leader Centre (AAYL).

The program initiated with the speech given by Madam Haslina, one of the biggest contributors of the event. Her speech included the purpose and a summary of the program itself. The entire program is divided into A, B, C and D which focused on Arduino Nano.

The event succeeded with part A, a fun filled and intriguing talk was given by one of our members Lance, on Arduino Nano. The talk was basically an introduction to Arduino Nano. Most students showed more interest when videos on the how useful and cool the device really is. Lance's enthusiasm is also to be praised as it made the talk an interesting and informative one indeed.

The day was then continued with 'Design Thinking Your Project'. This is where the students were required to involve themselves. They were all required to brainstorm ideas of problems that are to be solved in various sectors. They were first briefed and were given a guide on the issues. Once a crystal-clear briefing was given, they were all assigned a mentor. Mentors were to act as facilitators or coaches where they are to teach, guide and motivate the students to enhance the learning process. This part of the program is aimed to recognize and pry talents within the students. The brain storming ideas are to be finalized towards the end as it is their final topic which is to be presented during the IEEE expo which is to be held in May. The students were dismissed for lunch.

After a mouthwatering lunch session, the day proceeded with part B and C of the workshop. In this part of the workshop, each group member was distributed a handbook with an abundance amount of Arduino Nano knowledge content and an Arduino Nano kit. The mentors were required to bring the students anywhere around the campus to facilitate the session. Part B covered more on the sound implication of Arduino Nano. For instance, the construction of speaker with Arduino Nano. Part C was more lightings, such as the usage of Light Dependent Resistor (LDR) with the kit provided. This activity was intended to enable the practical style of learning with a more hands-on approach to familiarize them with the device itself. Students also get to experience the university atmosphere because of the dispersion of the groups. Feedback given by one of the mentors Eddie is that it was an exciting experience because being an international student with a Zambian native, communicating with people from different background was eye opening. He also added that he was satisfied with the enthusiasm shown by the participants and delighted that he could contribute to the society in nurturing the younger generation. With that final activity, the day was ended with a tea break with almost every Malaysians favorite, the ever-scrumptious roti canai and teh tarik.

The following day, Part D was conducted. This module comprised on the implication of internet with the kit, which included the input sensor, server moto and something we are very much familiar with, the Wi-Fi. The students were also given the freedom to work on their projects required if they finished the module. Lunch is then served.

Next was the 'Prototype Your Project' activity. The tittle very much explains the activity for itself. Students were permitted to use the knowledge from the handbook provided earlier. Engineers apply the principles of science and mathematics to develop economical solutions to technical problems. This program very much related to that job scope. It helps train to students to broaden their mindset and analyze data in a more scientific manner. Students were required to build a prototype which could solve simple daily problems faced by the community.

One of the projects involved was "Touch less Switch" by The Life Factory mentored by one of or members James. Being one of the most innovative projects solving a daily yet simple problem is having a touch less switch in our bathrooms. You may wonder why and how does it even help. After showering most of our hands are wet or maybe it occasionally it may also sweat. This device is built to prevent the user from getting electrocuted and prevent fire or burns in the house. It works by waving your hand over the touch less switch and the light in your bathroom will be turned on automatically. After taking bath, do the same thing, the light will be turned off automatically, and this can prevent you from electrical shock. Hence, the rate of occurrence of accident in the house will be decreased dramatically. The components used are Arduino board, breadboard, jumper wire, and resistors, IR LED, IR Phototransistor and LEDs. The setting up starts with connecting the IR LED and IR Phototransistor by using jumper wire to the breadboard and Arduino board. After that, type the code for the function of the components in the computer and upload the code to the Arduino board. It works when the user's hand is passed through the IR phototransistor and IR LED without touching them, the LED light will automatically turn on. Finally, when the hand passes through the IR phototransistor and IR LED again without touching, the LED light will turn off automatically.

The next activity was called "Pitch Tow In". Being an engineer doesn't really defines building and fixing hardware, soft skills such as communicating skills are also very vital. This activity is to bring out the confidence of the students. The students were required to sell their prototype to one another for a purpose which includes the economic, social or environmental factor depending on their prototypes. Their method of convincing and an appropriate body language played a huge role in selling their product and they were asked to assume selling their product in the real business field. A few pointers were given to help them improve where their lacking. A few of them performed really well, but some of them were timid and took some time to participate. An introduction to the actual Young Innovative Challenge which is held in May was given after settling down. They were briefed on the program flow, date, time and venue. The day was ended with a presentation by the students on their prototypes. Tea was served before their departure.

Community Service
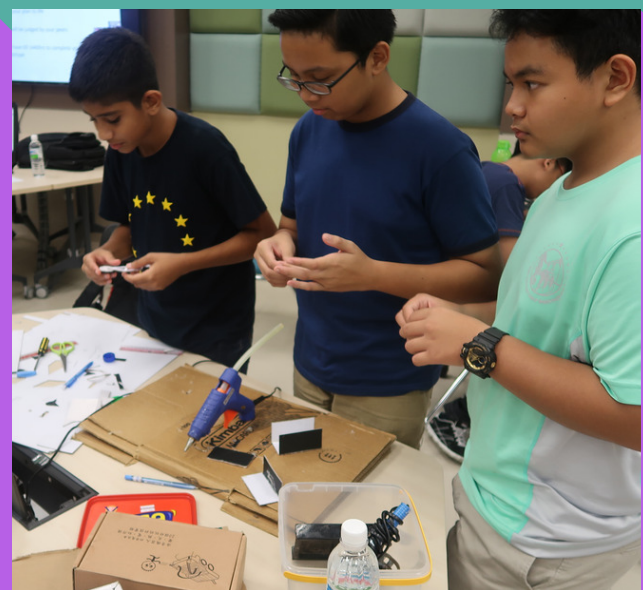
E-waste Collection

E-waste is electrical and electronic equipment of any kind that has been discarded. This includes practically anything powered by an electrical source. The term "e-waste" is applied to consumer electronic equipment that is no longer wanted. E-waste can include computers, printers, televisions, VCRs, cell phones, fax machines, stereos, and electronic games. IEEE Curtin Sarawak SB have taken the nobel initiative to run an E-waste collection drive. The drive was taken place at the LT Foyer and Recreational Hall on 27th to 29th March and 30th to 31th March respectively. The objective of this drive was to promote sustainability and reusability from a technological(electronic, computers, etc) standpoint.

Mainly the booth caretakers and the IEEE technical team were the organising team of this great effort. The team have successfully retrieved four big boxes worth of e-waste items. It is reported that the items range from office electronics such as printers, laptops, keyboards, and appliances such as blender and oven. The next step after the collection will be to hand-on filter the items. The team will categorise the items that can be reused for e-waste projects and items that can be rebuild or fixed. This process will be in loop for the whole year. Steps of collection, processing and usage will be given the utmost priority by the technical team.

Light Up Miri

Light Up Miri is a community outreach project initiated by IEEE Curtin Sarawak student branch to lighten up rural and suburban areas of northern Sarawak especially Miri with solar power. Rural areas face particular challenges when it comes to energy use. The residents of Kampung Pujut have not had the luxury of stable light supply for a very unacceptable period of time. Lighting is taken for granted in industrial countries and in many urban areas of developing countries. It is hard for many people to imagine living at night without being able to obtain light at the flick of a switch. IEEE has a great reputation for its social involvement to the local communities here in Miri. This initiative is in-line with the IEEE vision and mission – Advancing Technology for Humanity. In this project, IEEE Curtin Sarawak Student Branch is planning to carry out with technical workshops to up skill local community's knowledge. This effort is driven to educate local people on creating clean, affordable and modern lighting services to ensure sustainable development. This campaign is also based to raise awareness of renewable energy. It will indirectly upsurge an interest on electrical/electronic engineering and sciences in the communities especially the young generation in rural areas of Malaysia. Later to enhance living conditions of the rural communities who are affected by electricity shortage by constructing solar lamps.

State assemblyman, Datuk Sebastian Ting pledge his support with contributing to the project.

Murum Dam Site Visit

On the 7th April 2017, a trip was made to Uma Belor at 2.30 pm from Curtin. After reaching at 5.30 pm, participants could rest till the first activity. The first activity was a traditional dance in purpose of social gathering. The participants could learn the local cultures of Sarawak and engage with people of various cultural backgrounds.

The next day which is on the 8th April 2017, participants departed to Murun Dam at 8.30 and arrived at 10.30. An interactive tour regarding the dam was given. The Murum Dam is the second hydroelectric project (HEP) to be developed by Sarawak Energy. The dam uses the power of the flow of water through turbines (four sets of 236 MW Francis turbine generating units) to generate 944 MW of electricity. The main Engineer, Procure, construct contractor is Three Gorges Dam Company while Sarawak Energy acts as the project proponent in building the dam.

The Murum dam is a Roller-Capacity Concrete dam with a height of 141 m and a catchment area of 2,750 km. The size of the reservoir is 245 km. The dam site is located on the Murum River, which is in the uppermost part of the Rajang River basin, 200 km (124mi) from Bintulu. The upstream of Rajang river includes four steps, which are Pelagus, Bakun, Murum, and Belaga. The Murum Hydroelectric Project is the second Step-Hydroelectric Project of the four steps, and is 70 km (43 mi) from the constructing Bakun Hydroelectric Project downstream. participants were given goodie bags to end the session. After a filling lunch, they then departed at 4.30pm to visit the Tusan Beach which was the final activity of the whole site visit. After enjoying a breath-taking view, they decided to take a leave at 5.30 pm and reached Curtin at 7.00pm.

Kuala Lumpur Site Visit

Our club organised a site visit from the 17th till the 19th of April, in the aim of exposing the students to the working environment. On the first day, the participants were brought to Kuala Lumpur Conventional Centre (KLCC) where one of Kuala Lumpur's most famous tourist attractions the Aquaria is located. Featuring 60,000 square feet (5,600 m2) in two levels with a 90-metre (300 ft) underwater tunnel, Aquaria KLCC houses over 250 different species and over 5,000 land and aquatic animals from Malaysia and around the world. Interactive information kiosks on fish and turtle conservation. It includes a themed retail area of about 5,000 square feet (460 m2).

On the second day, they were brought to Siemens Malaysia in Petaling Jaya. Siemens is a global powerhouse positioned along the electrification value chain – from power generation, transmission and distribution to smart grid solutions and the efficient application of electrical energy – as well as in the areas of medical imaging and in-vitro diagnostics. Since 1908, Siemens has actively participated in Malaysia's dynamic, economic and social growth. Today, backed by its global network of innovation, it is one of the leading technology providers with comprehensive products and solutions for various markets in the Malaysian economy such as in Power & Gas, Power Generation, Energy Management, Building Technologies, Mobility, Digital Factory, Process Industries & Drives and Healthcare.
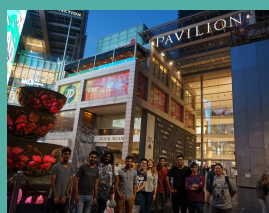
Right after having a scrumptious lunch, they headed to the headquarters of Astro in Bukit Jalil. Astro Malaysia Holdings Berhad (Astro) is a Malaysian and ASEAN digital-first media and lifestyle company in the Digital, TV, Radio and eCommerce space. It is Malaysia's No. 1 online media company with 5.8 million unique visitors per month across the digital platforms of its entertainment and lifestyle brands. Astro holds the distinction of the 'Gold' award in the Media and Entertainment category at the Putra Brand Awards for 7 consecutive years from 2010 to 2016, including the 'Brand of the Year' award in 2012, the 'Brand Icon' award in 2013 and the 'Malaysian Marketer of the Year' award in 2016. Astro Kasih is the company's CSR arm, whose award-winning programmes have been recognised for its innovation and life-changing impact on the community it aspires to serve.

On the last day, they started the day by visiting Batu Caves, a limestone hill that has a series of caves and cave temples in Wangshu, Gombak. Rising almost 100 m above the ground, the Batu Caves temple complex consists of three main caves and a few smaller ones. The biggest, referred to as Cathedral Cave or Temple Cave, has a very high ceiling and features ornate Hindu shrines. To reach it, visitors must climb a steep flight of 272 steps. Next, they were brought to Ioi city Mall, Cyberjaya for souvenir shopping and lunch. The last place they visited was MEASAT,Bukit Jalil, MEASAT Broadcast Network Systems Sdn. Bhd. operates as an integrated consumer media entertainment company primarily in Malaysia. The company's areas of business include pay-TV, radio, digital publications, and digital media. It provides services through direct-to-home satellite TV, IPTV, and OTT platforms. The company is based in Kuala Lumpur, Malaysia. MEASAT Broadcast Network Systems Sdn. Bhd. operates as a subsidiary of Astro All Asia Networks plc. That marked the end of the KL site visit 2017.

IEEE DIGITAL MAKER EXPO 2017

Mike Schmoker once said collaboration allows teachers to capture each other's fund of collective intelligence with that in mind the official IEEE Digital Maker Expo was organised on the 12th to 13th of May 2017 in the Curtin Sarawak Recreational Hall. Being one of the biggest event here in Curtin Sarawak, it was indeed a successful a fun filled event regardless the age group. Digital Maker Expo aims to provide opportunities to students from universities, secondary and primary schools and public communities to expose themselves towards the latest technologies such as 3D printers, embedded system, and other latest engineering products.

Digital Maker Expo also targets to raise the awareness of the youths and public communities about the future trend and the importance of programming in creating future thinkers and makers. During the event, an official launching of Malaysia digital makers' movement will be grandly initiated in the state of Sarawak. The aim of this movement is to transform Malaysian Youth from digital users to digital makers. In addition, digital maker space is set up in Curtin University for young innovators to create and make their products with the accessibility to lab facilities and measuring tools. Digital Maker Expo provides a platform to stimulate the volunteerism of students to reach out to the communities in helping the communities to solve their problems with technologies through programs Young Innovators Challenge Miri, Tech Maker and Light Up Miri.

Highlights Activities during the event launching of My Digital Maker Movement* in Miri Sarawak by MDeC, Uni-life and Faculty of Engineering(http://www.mydigitalmaker.com/),set up a Miri Digital Maker Hub in Curtin University, collaborative MoU signing with Keysight Technolgies for teaching and learning enhancement, launching of Delivery Solar Lamps to Kampung Pujut Corner by Datuk Sebastian, launching of Young Innovators Challenge Miri for young innovators to demonstrate their project, showcase of various high technologies and engineering products in the hall

The objectives and mission of this event are to transform Malaysian youth from digital users to producers in digital economy, to inspire and enlighten the interest of youngsters in digital technologies via programming and innovative thinking, to set up a Digital Maker Hub in Miri for public and students to learn and innovate their idea to expose latest trends of technologies to Malaysian youth, to exhibit the innovation of students' projects in solving real life problems, to connect with industries and create opportunities for students and public.

Young Innovators Challenge Miri is a program for secondary school's students to showcase their creativity, innovations and problem solving skills through Arduino projects which can help the community to solve their real-life problems. 60 secondary school teams are estimated to join this program during IEEE Digital Expo. ·

YICM – Open Category is a platform for all Curtin University students to expose to basics of embedded systems and coding through a hands-on learning approach as to instil innovative and creative thinking in students. At the same time, helping communities to solve their problems. 10 teams are estimated to join this program during the IEEE Digital Expo.

Tech Maker is a program, which provides a platform for students to learn technical skills with the purpose of serving the communities with passion. This program is also mainly to spark the new generations' interest in IT and programming which is the future trend. This program involves 7 technical modules, consisting of Mbot, 3D printing, Mobile App, Tech Art, Scratch and Solar Power.

Light Up Miri is a program which helps the local rural communities who are having a hardship in their lives as to enhance their technical knowledge about renewable energy and to raise awareness of the importance of educa

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IEEE Project Showcase is a showcase of projects done by IEEE Technical teams over the past years until now and to show the quality of technical learning in Curtin Sarawak as well as in IEEE.

Info Board is used to show public and students about the history, achievements and projects of IEEE Curtin Sarawak as well as students and lecturers from ECE department. Also, info board can also show some basic knowledges, news or articles related to Electrical and Electronics, programming skills and technologies.

Industries who sponsor this Digital Maker Expo will be entitled for having a booth to setup their projects/products and showcase to public and students during the expo. Also, in-campus recruitment can be happening at the same time. Tech Maker Workshop is opened for public and students to learn the 7 technical modules which consist of Mbot, 3D printing, Mobile App, Tech Art, Scratch and Solar Power. 1 row of tables will be used to conduct workshops to the public and students for the learning of the 7 modules mentioned. Arduino Workshop is also opened for public and students to learn about Arduino and what they can do with Arduino in their daily life. 2 rows of tables will be used to conduct workshops to the public and students for the learning of Basic Arduino and Advanced Arduino

Undergraduate Project Showcase is a showcase of projects done by Undergraduate ECE students over the past years until now and to show the quality of learning in Curtin Sarawak. Postgraduate Project Showcase is a showcase of projects done by Postgraduate ECE students over the past years until now and to show the quality of learning in Curtin Sarawak. Industries who support or sponsor this Digital Maker Expo will be entitled for having a booth to setup their projects/products and showcase to public and students during the expo. Also, in-campus recruitment can be happening at the same time.

The registration booth divided into two sections, (the expo kit distribution which included a booklet on the event, a feedback form, and lucky draw tickets) and the membership counter. Involving various corporate companies, secondary school students, Curtin students and the public, the event kicked off at 9 am with the judging for the Young Innovative Challenge(YIC). Secondary students from the YIC workshop were to present their final projects along with their prototypes. After that, the opening ceremony took place. Speeches were given by our club president, (Mr Kong Sheng How), Dean of Faculty of Engineering and Science (Dr Lau Hieng Ho), Curtin Malaysia's Pro Vice-chancellor (Professor Jim Mienczakowski), and finally the speech by the representative from Malaysian Digital Economy Corporation (MDEC) whom also launched their initiative, the Digital Maker Movement, a joint public-private-academia initiative to transform Malaysian youth from digital users to producers in the digital economy.

Right after that, the Memorandum of Understanding ceremony took place. The first one was between Curtin Malaysia and Keysight Technologies followed by another with SIRIM Measurement. One of our club's event the Solar Lamp Delivery was then launched by the general secretary of Sarawak United for People's Party (SUPP) (YB Dato Sebastian Ting) and the opening ceremony ended with the one of the vice presidents from (SUPP) as well (YB Datuk Lim Kim Shin). A group photo was finally taken officially mark the launching of the opening ceremony.

The expo is then proceeded with resumed judging of Young Innovative Challenge (YIC) and there were booths set up by student clubs and industrial exhibitors. The booths were interactive booths which included games and information regarding the association itself. The games did not limit the age group as there were games for everyone. At 3.45 pm, the announcement of YICM Top six winners were announced. On the next day, the event started with the announcement of top six YICM on-stage pitching. Followed by informational industrial talks by corporate companies like SIRIM, Shell, Tegas, IM4U, Chumbaka and Curtin Marketing. Wrapping up the entire event, the award presentation for the most popular innovators, best team cheers, best innovative idea, best pitching, outstanding digital makers and finally the lucky draw of grand prize was given to the respective winners.

DAy 1

DAy 2

INTERVIEW

IEEE CURTIN MALAYSIA STUDENT BRANCH
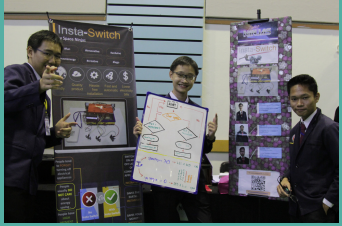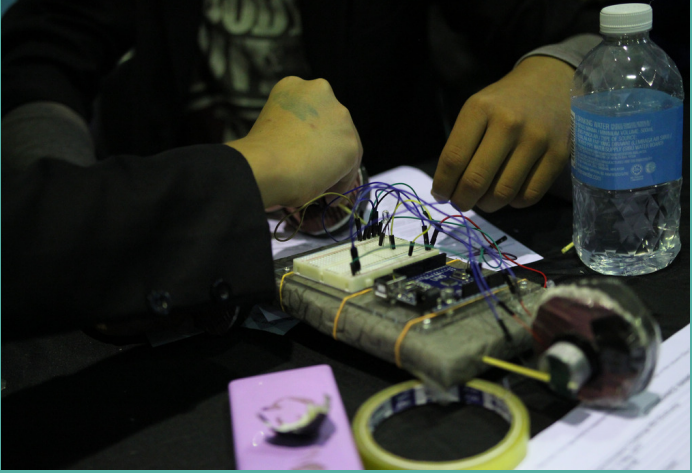
Esther Kueh Yue Ning

Esther Kueh Yue Ning is a graduate from Curtin University Malaysia with a Bachelor of Engineering (BENg) in Electrical Power Engineering. She has served as the Head of Newsletter in 2014 and then continued as Vice-President of the Curtin Sarawak IEEE Student Branch in 2015. She became the first student of the university to receive the prestigious Maxis Scholarship for Excellence Award (MSEA) 2013.

1. Tell us a bit about your background
I am from Kuching, and am the eldest of 3 siblings.

2. What advice will you give to students in order to succeed at university?
Set up for yourself a goal, a purpose, a vision, and work towards it. There will be times where your notions will be challenged, so it is important to hold on to certain principles in life, for it will keep you grounded.

3. What are the values that you have learned from organizing and joining IEEE Sarawak Student Branch events that you currently use in your professional work life?
The values of honesty and integrity are what I have learnt from my IEEE Curtin days, and what I still hold on to as I carry out my day-to-day work. In both cases, you have been entrusted with a task to carry out, and you are expected to deliver. Most work is done as a diverse team, and so in the absence of such values, the quality of the work that is delivered may be compromised.

4. From your own experience, how will the Young Innovators Challenge Miri (YICM) help the school students in their education?
It gives students the opportunity to be exposed to programming and technology, and gives them a platform to demonstrate their problem-solving capabilities. This is apparent in their project showcase to the public and to the panel of judges. Students show that they can go above and beyond in solving problems, and it is such an exciting thing to witness!

5. What were your feelings when you won the Maxis Scholarship for Excellence Award (MSEA)?
I was humbled and encouraged to work hard in my academics, and to sought out opportunities to further develop myself as a leader.

6. What were the key efforts that you contributed in order to achieve this award?
As I've answered in Question 2, it is important to be intentional in the activities or clubs that you choose to be committed to, such that it is in line with the purpose that you've set out for yourself to achieve in university.

In my case, I applied for the award upon completion of my foundation studies and had not been active in extra-curricular activities in Curtin, so I had little to prove in comparison to the other applicants. I believe that it was by God's grace that I had been awarded the scholarship, and I've sought to honor God in the decisions that I've made and in the way I carried myself in Curtin. Hopefully, this serves as a form of encouragement to you readers, that there is hope, even when the journey gets tough and when there is seemingly no light at the end of the tunnel. Keep pressing on! :)

Community Outreach Team 2016

The community outreach team plays an important role of organising and coordinating such events that involves the local community participation. The local community here in Miri, will benefit as much as IEEE Curtin Sarawak Student Branch does when in comes to fulfilment of duty. The current team has taken home, the glorious Datuk Dr.Lee Kim Shin Outstanding Student Community Contribution Award during Award Ceremony 2017. The team consist of Francelouis Tie Sing Yong, Kong Sheng How, Bong Chu Jun, Li Zhen Er, David Ha Heng Lee and Ng Kay Li.

1. Tell us a bit about your team's background

Our team consist of me myself (Kay Li), Zhen Er, Chu Jun and David. Chu Jun and I am from second year while the other two gentlemen are from first year. We are supported by our beloved presidents Jeff and France, of course our advisor Dr Garenth and Ms Haslina. It's all started at the end of the semester where we volunteer to be part of this team. Four of us, who are used to be stranger to each other came together to carry out this responsibility. None of us have the experience in guiding mentors and handling a bunch of secondary school students. After numerous discussions, debate and meetings, we solved every obstacle and as time passed, we grew from nothing to something! We had been through thick and thin, support each other and encouraged each other until the end of this community outreach journey.

2. What are the values that you have learned from organising and joining IEEE Sarawak Student Branch events ?

Joining IEEE events taught me the beauty of communication. Despite all heavy load throughout the semester in addition to challenges imposed by external force and internal problems, communication is always the key to solve all the issue. Knowing one's problem before making any judgement is a sign of respect to others. Understand and put ourselves in their situation makes them felt valued. With these initiative, which enhance the comfortability and belongingness in the mentality of a person, providing a very minimal effort always bring huge impact. Therefore, joining IEEE taught me that, technical problem will never be a problem when communication is done well

3. From your own experience, how will the Young Innovate Miri (YIM) help the school students in their education?

Before joining the first Arduino workshop we conducted, the students have no idea what is voltage or current, not to mention the micro controller- Arduino. Throughout 4 hours of workshop, their growth in thinking skills surprised us! Struggling to solve and understand some terms and problems, unable to identify the errors in code or circuit. They learnt and solved the obstacles one after another and still enjoy the learning process. It was a different way to learn for the students but they loved it. I believed, that is the attitude and persistent which is the most important lesson they benefited from YIM. These experiences and thinking skills developed are useful and applicable in their studies and even their daily life!

4. What were the key efforts that you contributed in order to achieve this award?

The key effort that I have contributed to achieve this award is, being a middle person to solve all the issue arise. To smoothen the flow of the progress, I have contributed my persuading ability to persuade more peoples to join and volunteer for our events to keep our human resources full.

Francelouis Tie Sing Yong

1. Tell us a bit about your background

I was a graduate of Electrical Power Engineering. I joined IEEE committee since 2016 in community outreach division. That was my first time approached sub-urban and rural areas within Sarawak. I discovered their needs, which IEEE can be contributory to them. I might be weak is software based engineering, but proudly to say that I am more than a "passed" hands-on technical people. In 2017, I was nominated as President. I got a lot guidance from lecturer and networking between other student branches. From that, my visions and missions towards IEEE expanded.

2. During your time with IEEE Sarawak Student Branch there was a similar program known as Light of Borneo, how does this compare?

I could say Light of Borneo (LOB) was an unexpected opportunity technical platform for IEEE. LOB actually was initiated by another party, whereby IEEE was just a collaborator. For LUM wise, IEEE becomes the program host and other parties join us to achieve the goals together.

3. What advice will you give to students in order to succeed at university?

Self management is the most important, including attitude, time arrangements, do things smart instead of hard and do not be lazy. Always think and explore things outside the box. Be a real engineer, not a philosophy. Engineering is a kind of attitude, manner and profession, adapt the skills before entering society. People will expect your professions, do not influence one's mindset toward an Engineer. Engineers play important role in society and industries.

4. What are the values that you have learned from organizing and joining IEEE Sarawak Student Branch events that you currently use in your professional work life?

Arrangement skills and leading skills. Once you are an Engineer, you are a step higher than normal people. High expectation towards you could not be neglected. As I mentioned before, IEEE is a pre-society for us to learn and make mistakes. These save our time in our professional working life. Be a logic decisions maker, not a stingy people. Understand one's needs and circumstances before concluding solutions.

5. From your own experience, how will the Light of Borneo help the villagers in the society ?

Villagers will aware of the importance of "Engineering" and sciences. They might be dull towards studying, but they might be the next inventor and Engineer. LOB showed them how we fully utilized technology to help those needy. I believe through LOB, their passion towards technology was aware and built. Adapting the skills we gave, they could be independent and help other needy as well.

6. What were your feelings when you won the award ?

The award is contributed by IEEE, not me myself. Without teamwork, no one could achieve today's goal. The glory is shared with whole IEEE team.

7. What were the key efforts that you contributed in order to achieve this award?

As an initiator, created a clear path for volunteers and committees to achieve goals together. As a beginner leader, learned to lead and make mistakes. Thanks for the tolerance and rationality from my committees, we learned and fought together for IEEE. IEEE must be a high sustainability family.