



UTM Data Engineering student Visit to AI and Data Week exhibition

11 September 2019 Undergraduate students from computer science (data engineering), school of computing, faculty of engineering, Universiti Teknologi Malaysia (UTM) visited the AI and Data Week. This visit had been proposed by Dr. Aryati Binti Bakri which is the director of Technology and Information System (SECP 1513) subject. This program involved 37 students who took SECP session 02 subject.

The expo was held at the Kuala Lumpur Convention Centre, right in

the heart of the country amidst skyscrapers and beautiful fauna. This visit was done right after the previous industrial visit to Petronas twin towers and office on the same day. The expo was organised by Malaysia Digital Economy Corporation Sdn. Bhd (MDEC). The purpose of the visit was to create exposure and gain direct insight in the data industry. Besides that, it also exposes the students to new technology surrounding the data and Artificial Intelligence industry. These insights are key to generating and cultivating bleeding edge minds that are ahead of the curves.

The details of the journey is as follows;

| TIME | DETAILS |
|-----------------------|--|
| 11:15a.m. -11:30 a.m. | Arrive at AI and Data week expo |
| 11:30 a.m. -1:30 p.m. | Visit booths and gather information about the expo |
| 1:30 p.m. | Lunch and begin journey back to University |

About 37 students from Data Engineering course do the visit to the AI and Data Week

Exhibition contents and Trends in Artificial intelligence and Big Data

The exhibition is related to Artificial Intelligence (AI) and Big Data. The exhibition is officiated by YB Tuan Gobind Singh Deo which is the minister of Communication and Multimedia Malaysia. The exhibition is a comprehensive exhibition which gathers a lot of big companies that have the latest technologies and machines. These big companies are My Traffic Smart City Solutions, Fusionex, Capillary and more. There are a lot of booths and college students gather at the booths to get various informations in order to improve themselves. Furthermore, the exhibition profile includes creators, production Companies, IT, technology, content marketing system or related services etc.

Firstly, we visit the My Traffic booth. MyTraffic provides Smart City Solutions for traffic control, all based on the Internet of Things (IoT). There are several open platforms of My Traffic such as smart traffic signal system, traffic analytics, smart surveillance, bus information system, smart parking system and smart street lighting. One of the thing that catch our eyes are the traffic analytic program. This is because the program can detect the vehicles and provides real-time statistics of traffic flow, average stop, vehicle speed and vehicle types. Next, three of us go to the Fusionex booth. After the explaining of Mr. Kelvin Soh, the Pre-sales Manager, we know that Fusionex is a

multi-award winning IT software group, specializing in analysing and interpreting data, good in the Internet of Things (IoT), Artificial Intelligence and deep learning. Mr. Soh, we know that how data and AI help in providing answers, creating dashboard, helps in business uses cases and more.

Last but not least, we visit the MDEC booth and we have a better view of the digital economy after getting the explanation from the exhibitors. Nowadays people uses digital technologies to communicate with people. People buys things online using shopee and Lazada (Big Data) else the high-tech restaurants



One of the company that participate in AI and Big Data week.

not using human resources anymore. They have updated to meet the new digital world and taking the robots (AI) as waiters or waitress. MDEC are specialize in this field and they always apply digital technologies in most of the stuffs. "Getting everyone on board with digital means every member of our community must embrace digital technology."

From the expo, a lot of developments were leaning on the side of smart cities, facial recognition and data processing services. Facial recognition is a software that processes a face input and cross examines it with existing data for a specific purpose. Currently, this technology is widely used in modern day smartphones. These sort of facial recognition are used as a security measure when unlocking phones. Although the first generation of its kind had its flaws, the software and technology has aged beautifully to become what it is today. Some companies are so confident in their take on the tech that they go as far as to use facial recognition to verify and approve transactions such as online cash transfers and payment for online purchases. Besides that,

artificial intelligence is more widely being used in home security, namely smart home. For example, if an unregistered face shows up at the front of your door, you will be immediately notified on your connected smartphone. The best part is, unlike usual closed circuit television (CCTV), you don't need to go through hours of scrubbing through footage to find the crook, instead you can get video surveillance in real time and can help you act quickly, and giving you prompts to contact the authorities.

Besides facial recognition, developments in the field of artificial intelligence has proven to be taking a step in the right direction. Powered by machine learning, artificial intelligence software are better than ever. Take Google duplex for example. Google duplex is a project developed by Google as a personal assistant, a successor to the already existing Google assistant. This software is pretty much a personal assistant that you carry in your pocket, and that is no exaggeration by any means. Before this, you could summon Google assistant to give you information about a restaurant that you want to go to. Now, Google Duplex has change the game.

Instead of just giving you information about the restaurant, it can now make a call and speak on behalf of you and make the reservation for you. The software uses an AI-driven voice that is so humanlike thanks to AI learning that it is close to impossible to distinguish between the AI and the actual person.



About FUSIONEX

FUSIONEX is one of the booth that we visited in the exhibition. There are 3 people in charge when we visit the booth, and they explained all about FUSIONEX to us.

FUSIONEX is a data technology provider that specializes in Analytics, Big Data, Machine Learning and Artificial Intelligence. They help clients manage, make sense of and derive useful insights and information from the vast amounts of structured and unstructured data at their disposal. They are also focused on

business and technology, and in doing so, providing an exceptional and positive experience to customers of various markets. FUSIONEX have many big company as their featured clients, for example AirAsia, AEON, AmBank Group, CANON, celcom and intel.



Our team while visit the FUSIONEX booth.

Our Reflection from the visit

We are so thankful to Dr. Aryati for leading us and thanks for the invitation of industry. It is very meaningful and we gain a lot of knowledge through this visit to the exhibition. Data engineering have involve in many aspects in the industry. We have chances to meet many exhibitors that we have not seen and interact before. This really open our mind that by using data, many things can be create, can be avoid and problems can be solved. We had gained the knowledge that how the smart city can be form in the future and data engineers have play the role on it. They need to engineer systems to source all of the image data and store it.

Data engineers usually work in team and there are four main fields they must pay attention to, those are data ingest, data warehousing, data analytic and data applications. Data engineers get the data from people and analyzing it. If required, perform data modelling on the data for easier way. In an easier way, we can say that data engineers extract knowledge or insights from data in many forms. So, the extracted data will help the AI figures out the wise solutions to solve problems by linking similar data.

The improvements for me to improve my potential in the industry is I would looking for more information about the AI and big data. If there is similar industrial visit in the future, I will grab the chance taking part in it. Moreover, I will improve my creative and innovative skills to give more wise and powerful ideals in problem solving. Besides that, Big Data professionals must understand the business skills. It is very important to learn new technologies that are relevant to my big data job role. Therefore, we have to study harder to achieve my goal.

In our group there is Josiah Jeevanraj Joseph (Jo), Ham Jing Yi (Jing Yi) and Intan Marina binti Sulaiman (Intan). At the exhibition hall, Jo act as leader in our group and his task is to lead our group to greet the person in charge at each booth. Jo introduced our group to them and tell our purpose by going to their booth. Jing Yi and Intan ask questions and take note the answer or advice from the employee at the booth also take some picture around the exhibition. We also collect information by take the contact information or exhibition content from each company.