



# UTM SECP Students visit Next Big Tech Asia 2019

The UTM Data Engineering students conducted a visit to the Next Big Tech Asia 2019, held at the Kuala Lumpur Convention Centre. The exhibition express purpose to gather the industry titans in Artificial Intelligence and Big Data from all over the world to share their achievements in their field of work. Accompanying those students are Dr. Aryati Bakri and Dr. Muhammad Iqbal Tariq bin Idris, senior lecturers from UTM.

The exhibition enabled the students an opportunity to gain insights on the use of Artificial Intelligence and Big Data straight from the source, the innovators in the industry. There were roughly around 10-11 companies who were proudly opening booths and displaying their solutions and accolades to the attending delegates.

One of the directors of the companies attending the exhibition, Philip Ong of AccelTeam was successfully interviewed by the students. He attributes his company's success with its industry-leading business analytics, reliable data warehouse automation and data integration solutions. The key ingredient of those successful ventures is the careful application of Artificial Intelligence to manage the massive amounts of data businesses today collect but cannot process efficiently on time-critical tasks. He pointed out that he highly values graduates that are capable of innovation and working in a team as well as leading one. Under his leadership, multinational companies (MNCs) all over Malaysia turn to him in order to secure their growing needs to handle the data side of their business. Additionally, Mr. Philip has expressed interest in joining the UTM 2u2i program, stating the entry of new graduates in the industry will do well under their extensive internship.

Next, the students visited the Talend booth and met with the company representative. She explained that Talend is a company that provides data handling services to companies, handling all their extract, transform and load (ETL) requirements. Clients on average save 80% of their time when using Talend to handle their data in business needs and simply the bulk of the information into easily digestible formats for company executives to make use of during decision time. Furthermore, Talend also provides basic data handling rules to prevent data loss and unauthorized personnel from accessing valuable company data.

WiseAI, one of the exhibitors in the Next Big Tech Asia 2019, showcased their cutting-edge facial recognition technology to the attendees. WiseAI is a company that specializes in Artificial Intelligence to sift through an automated biometric security system that captures facial data directly from cameras. This process involves multiple processes, that is facial detection, face attribution, face image retrieval and comparison, an arduous task if done manually, but with the power of Artificial Intelligence and Big Data it can be done quickly and systematically. It is hoped that consumers and business owners will utilize this technology to effortlessly purchase items online without any fears of identity theft or online shopping fraud. Facial recognition is also an effective deterrent towards crime, for example shoplifting and robbery in physical locations such as brick-and-mortar stores as they can facilitate the record of the crime, the identity of the criminal and live emergency information on-site.

These new technologies can help organizations solve previous problems and tackle new ones. For example, WiseAI has successfully applied artificial intelligence to track faces on visual video streams, a feat that was once considered impossible. In businesses, there is a lot of data collected from sales and customers but since there are a limited amount of data analysts available in the company, the amount of data they can process is limited and the conclusions that they make can only be derived from that limited amount, possibly making biased and inaccurate statements that can affect company operations. Big data strength lies within its accessibility, a large amount of structured data, that is collected and sorted out automatically can be used to funnel out clear number and statistics, which then can be cleaned up by the data analysts and let them see the bigger picture.

## Trends in Industry

The value of integrating modern technologies such as the artificial intelligence and big data into their operations are recognized by government and companies, with both shifting their focus on service-based economy and beginning the transition to a digital-based economy. This shift in policy is indicated by the current Communications and Multimedia Minister Gobind Singh Deo, who remarked that the technology will be employed in the Industrial Revolution 4.0 and made it a top priority for his ministry during the Next Big Tech Asia 2019. Additionally, MDEC has plans to directly utilize AI in government services by developing a National AI Framework. Those plans and frameworks cannot be realized if there is no people who are capable of knowing where and when the technology can be applied. In other words, the lack of STEM graduates equipped with the prerequisite skills such as problem solving skills, creativity and a creator based mindset will stunt the growth of these fields, hence graduates prepare themselves accordingly if they are to enter the workforce within the next decade.

After joining this AI & Big Data Week 2019, the UTM Data Engineering students stated that the exhibition was enlightening for the first-year students as it enabled them to gain more knowledge about their future jobs. Information gathered from this event soon proved to be instrumental in efforts to plan out their career pathway, by adjusting their targets to the industry needs accordingly. The exhibitors praised the students, remarking that data engineers is a job in high demand in the foreseeable future. They noted which programming languages and technical skillsets are needed to survive in the industry, such as Python, Apache Hadoop, Apache Spark, HIVE. Soft skills such as people management, critical thinking, negotiation and creativity are also needed within the industry, so therefore the UTM students are encouraged to participate in extracurricular activities alongside their academic classes to sharpen up those skills.

This report is prepared by a team of 3 UTM Data Engineering students. Ariff Fansuri was tasked to interview the exhibition personnel and proofreading the reports. Loh Yew Chong oversaw writing out the results of the interview, finalizing the layout of the report and compiling resources. Nor Armirani was responsible of taking pictures during the exhibit and writing the rough draft on the event that day.

**11 September 2019**

**Prepared by:**

Ariff Fansuri

Loh Yew Chong

Nor Armirani

**Skills needed in the industry**

People Management Skills



Creator's mindset



Critical Thinking Skills

