UTM UNIVERSITI TEKNOLOGI MALAYSIA

SCHOOL OF COMPUTING
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TITLE:

Report on Industrial Visit 1

(ADAX)

GROUP MEMBERS:

NAME	STUDENT ID
KALAI ARASIH A/P RAMACHANDIRAN	A18CS0088
AIMAN SHAQUAN BIN MOHD YUSOF	A18CS0021
ALIA KAMALIA BINTI KAMALUDIN	A18CS0024

LECTURER:

Dr. ARYATI BINTI BAKRI

SECTION:

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Asean Data Analytics Exchange (ADAX) Industrial Visit

By: Aiman Shaquan, Alia Kamalia, Kalai Arasih

The industrial visit to ADAX (ASEAN Data Analytics eXchange) was held on the 26th October 2018 by the Technology and Information System course lecturers of Faculty of Engineering, School of Computing. The lecturers who were involved in this visit were Dr Aryati Bakri and Dr Shazlin. The main purpose of this visit was to create awareness among the Data Engineering course students about the careers in Information and Technology field. Hence, all the students who are in Data Engineering course were involved in this visit. The trip started at 10.00pm on 25th October 2018 (Thursday). We were instructed to gather at the Kolej Tun Dr. Ismail carpark and then went to Kuala Lumpur by bus. We spent the night at a mosque. Around 8.00am we left the mosque and started our walk to ADAX. Once we reached ADAX, we were asked to register ourselves.

The program at ADAX started off with some delicious breakfast. Once all of us had our breakfast we were asked to gather at the seminar hall. There were three speakers who gave speech on that day. First of all we were briefed what is ADAX. ADAX is an initiative by MDEC to enable businesses, governments, academia and professionals to rapidly adopt Data Analytics as a tool to empower decision making and innovation. ADAX seeks to be the definitive Data Analytics Exchange Hub for knowledge, information, resources and collaboration for the ASEAN region. The main goal of ADAX is to develop the ecosystem, build a critical mass of talent pool in the big Data Analytics category and to foster collaboration amongst businesses, start-ups, academia and professionals so that Data Analytics becomes an integral part of business innovation and decision making. ADAX offers an innovative lab, talent development and startups. ADAX offers massive open online classes, hackathon, job matching, shared training and tech labs under talent development programme.

There were three speakers gave speeches during our visit. One was ADAX representative; one was from Fusionex, and another from SAS. The first speaker started off her speech with a brief introduction of herself. We were to do a quick career test. The speaker has briefed us about the Data Technology Adoption Programme. The objective of this programme is to accelerate data technology adoption and develop/ drive Data-Driven Decision (DDD) Enterprises and to develop tunnel for high impact use cases to benefit national interest such as productivity gain and public safety. Drive Data Technology Adoption is has two categories. One is Data Technology Partnership Programme and the other one is Data- Driven Decision Enterprise Adoption Programme. Data Technology Partnership Programme is an ecosystem for collaboration to catalyse data technology adoption whereas Data-Driven Decision Enterprise Adoption Programme is a two-pronged approach covering the whole spectrum of data-driven decision enterprises. There are two maturity level. The relatively new category generate funnel for DDD Enterprise Adopters whereas the relatively matured category attracts serious DDD Enterprise Adopters with Data Technology Partners. The focal point for DS & AI community events are it works with private sectors, universities, industry organizations, and NGOs on areas such as Industry Pain Points, National Challenges, and Societal Issues via channels such as events, workshops, hackathons and meetups.

The speaker also has briefed us about the data camp held by ADAX. Data Camp's lessons are bite-sized so we can learn in a way that fits our schedule, on any device. This will be monitored by our lecturers. She said that lecturers can also give assignments in the web. The web has sample coding, and also hints to guide students in coding but with condition it will deduct 30 points. At the end of the assignment the lecturer will count the remaining points. The structure of this programme is it has 6 months access for academics, lecturer/ teacher to register the class and there will be minimum of 10 students per class. The topics that will be learned are R programming, Python programming, Probability and Statistics and Data Visualization. The benefits of joining this programme is there are statements of accomplishment, full access to entire course curriculum, leaderboards and private discussion forums, and MDEC Talent Marketplace. We can join data camp by simply sign up in the data camp page and wait for a confirmation email.

We were also briefed about Mydigitalmaker which provides Digital Tech Career awareness or counselling. It introduce Digital Tech Foundation courses, secure green lane placement for high potentials, secure scholarships (government and industry), integrate industry relevant modules, shorten the approval process (MQA and MOHE), 2U2I, Industry placements, Professional development funding, National Digital Economy Skills Matrix. Other than that, there is Premier Digital Tech IHLs Ecosystem. The objective of this programme is to create sustainable talent pipeline for industry, recognition for future digital talents, strengthen awareness of and confidence in digital tech related career and set a benchmark to be emulated by other institutions.

Premier Digital Techh Universities are universities that has green lane preferred enrolment for talents, Digital Career Centers (DDC), Digital Expert Panel (DXP), Influencer Development Programme, and Undergraduate Development Programme.

We were also briefed by a representative from Fusionex. Fusionex is an established multi-award winning data technology provider that specializes in Analytics, Big Data, Machine Learning and Artificial Intelligence. It has more than 1250 staffs globally in 15 different countries. There are 120 Data Scientists, Data Analytics, and AI Researchers. It has more than 10 years of experience in the enterprise, travel and hospitality, retail, manufacturing and public sector IT space. The speaker from Fusionex spoke about being a data hero. The speaker stated that there are two steps in being a data hero which are we need a very good knowledge in Mathematics and the next step is mastering Python.

He also told us about Artificial Intelligence which is widely being used in industries. Example of AI in Industries is Defective Glove Identification using AI for Glove Manufacturer. The challenges faced were to employ a large QA team to manually inspect the quality of the manufactured glove, time consuming in QC stage (manual), Low accuracy rate (<60%) on the existing imaging solution identifying the defective gloves thus still require large QA team to perform second round checking. Hence, the solutions were Fusionex Image Intelligence powered by AliCloud is used to receive the images captured by the existing imaging system and immediately classify the quality of the glove and identify the root cause of the defective glove. The solution us running on Deep Learning algorithm, with the auto-learn and improve capability on the model. This improved the accuracy rate to 96% and the algorithm was able to detect the defective glove within 0.3s for every glove.

Next, we were given speech by a speaker from SAS Malaysia. It has been 32 years in the country with 100 over employees and 150 over clients. SAS does sales, sales support, professional services and many more. The SAS speaker spoke about industrial revolution, internet of think and AI. He said that the industrial revolution had 4 stages where it begun with steam and water power, to electrical power, to IT system and robotics to cloud technology. AI at SAS says that their belief is AI augments human abilities and becomes a part of our digital world, their approach is to turn insights into actions by embedding AI within the SAS platform and their solution is improving areas with AI such as Fraud, Security and Customer Intelligence, Risk, IoT.

Right after the talk, we were brought around ADAX office to visit their workplace and facilities. Overall, their workplace can be said as a stress-free working environment, it was very convenient and we really felt relaxed while visiting their meeting room, cafeteria and all.

Figure 1: Main Entrance

Figure 2: Cafeteria

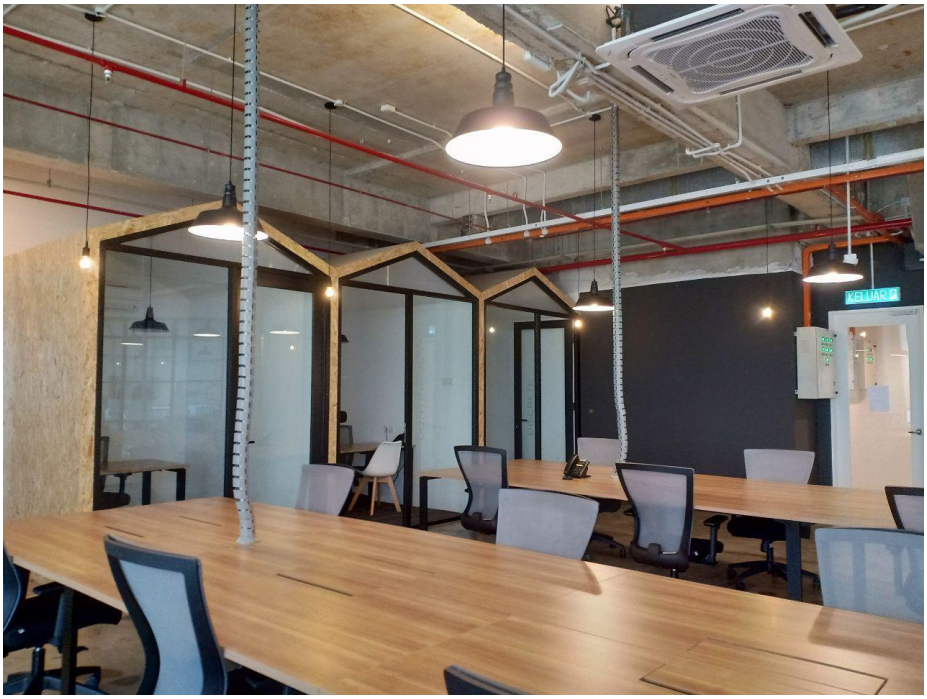

Figure 3: Workplace

Figure 4: Pantry

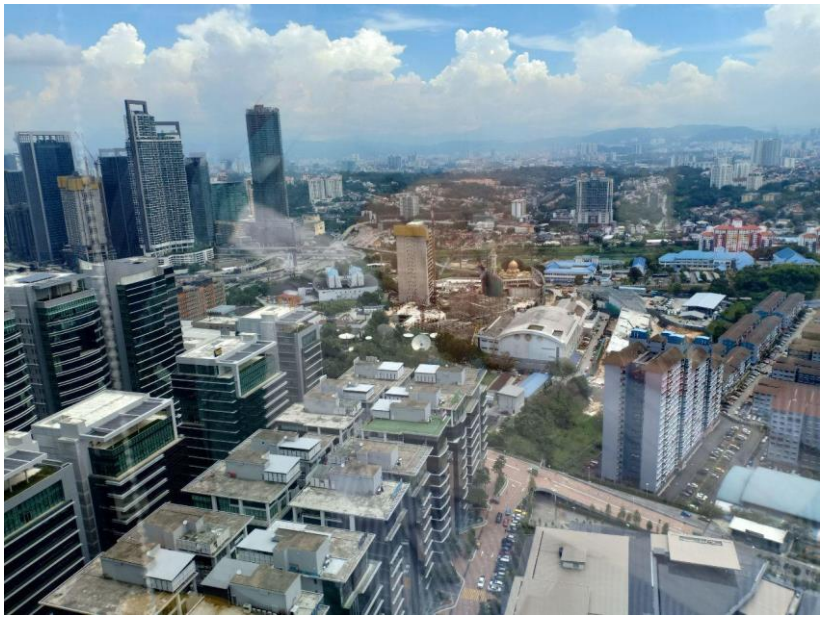

Figure 5: Top-view from ADAX office

Figure 6: Mural at Cafeteria

In whole, this visit has given a big impact on our dream and career goals. This visit was indeed very eye opening to all of us as we were given a lot of information on how our lives are going to be once we have graduated. This visit was indeed very motivating to all of us to study well and strive for excellence. We have learned that we need to work hard in order to be employed by such a prestigious company in the future. We need to score well in all our upcoming exams if we want to be a part of all these companies. We guess all the students who joined this programme will join all the programmes offered by MDEC because all of the MDEC programmes are very beneficial in our future. We are hoping for more similar visits in the future.

References

1. http://adax.asia