

TECHNOLOGY AND INFORMATION SYSTEM (SECPI5I3)

NEWSLETTER

Industrial Visit to Petronas & Huawei



SUMMARY OF THE VISIT

Students of SECPH section 2 and 3 gathered together and departed from UTM on 16 November at 10:30pm, and arrived at KL at approximately 8 am. Our first stop is the Menara ExxonMobil, Kuala Lumpur. After having some light refreshments, we began listening to a talk by the experienced, including the discussions on infrastructure services and software engineering. The most compelling part was the QnA session as we are free to ask any questions that we have in mind and the professionals will answer. Many

of us stepped forward as the opportunity is hard to come by. The talk increased our understanding of the field and were also motivational to inspire us to be ambitious and passionate of our career. After having the photography session, we bid farewell to the friendly staffs and moved to our next destination – Huawei Technologies Malaysia.

At **Huawei** company, we are split into group of two and introduced to the different technology inventions in Huawei Company in stations. The staff explained several products of Huawei that they are proud of and a lot of them seemed new to us. The visit to Huawei company had introduced us to the curious and wonder of IT world and encourages us to learn more. That concludes our joyful and wonderous journey.

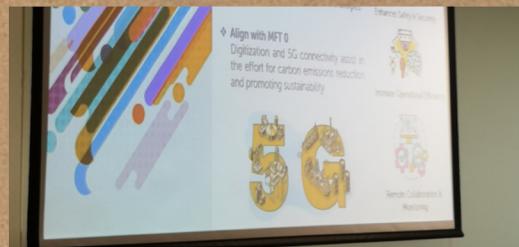
THE TECHNOLOGIES AND ISSUES DISCUSSED IN THE VISIT

PETRONAS

The Head of Infrastructure Services, Sir Ninderjit Singh, gave a brief overview of his department's work during the first talk slot. They are in charge of overseeing the server, storage, database, network, security, and applications. They also handle server setup, alert and notification monitoring, and monitoring. In addition to keeping up with the rapidly changing technical scene, their goal is to optimize the DC and ICT infrastructure to guarantee service security and dependability.

Using the most recent **5G technology**, they also hope to transform the oil and gas sector by enabling seamless connectivity, lowering carbon emissions, and advancing sustainability. Additionally, they make use of **cloud computing**, which offers more flexibility, improved security, enhanced productivity, and lower costs. They also employ **SD-WAN technology**, which improves the speed, dependability, and efficiency of their connections to cloud platforms.

For the second slot, Roman Kvaska, Head of Software Engineering at Petronas, gave us a basic overview of what software engineering is and what makes a competent software engineer. Among the innovations employed by Petronas is the **Unmanned Ground/Aerial Vehicle (UGV)**, a robotic application for equipment inspection used in challenging terrain. Along with data analysis and accessibility features, **smart glasses** for frontline workers at Petronas let them carry out regular tasks safely. Additionally, there are **Plant & Enterprise Applications** that offer control and real-time monitoring, such as centralized operation and maintenance command.



HUAWEI



Director Huawei demonstrated their technologies during this industrial visit by touring the facility and taking a look at its technological advances. A variety of topics that are not covered in the syllabus include the **CloudEngine 6800 Series Data Center Switches**, which allow carriers as well as companies to create cloud-oriented data center networks, the **ECO Series Antenna**, which saves a lot of feeders and cables and lowers impedance loss, and numerous others. They made a significant impression on us by using the most advanced technology.

For instance, the **Huawei Smart Classroom Solution** comes with a number of technologies that might make teaching easier for teachers, like the **Huawei IdeaHub**, **Digital Board**, **Camera System**, and **Visualizer**. Additionally, students' performance in the classroom will rise as a result of the usage of technology in the classroom, which will make learning more engaging and enjoyable for them.

In addition, every product in the store is represented by a picture on Huawei Smart Retail Solution. The sensor on the machine will detect the products and calculate the total cost of the products when they are placed on the counter. Thus, customers' purchasing experiences can be improved and the checkout process sped up with the help of this technology.

In summary, Huawei's technological issues and successes have increased our understanding of the importance that technology plays in everyday life. It greatly facilitates our everyday lives by making tasks easier and creating a more comfortable environment.

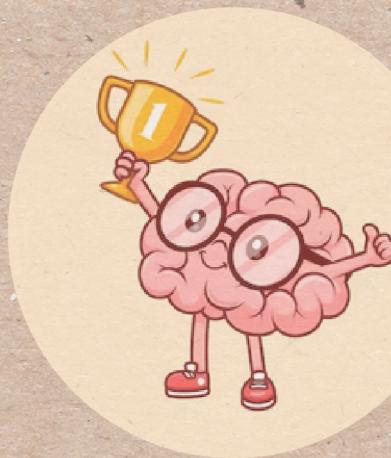
REFLECTION

PETRONAS

From Sir Ninderjit Sing's speech, we learned that the operation of a department is not achievable through the efforts of a sole individual. Each department must collaborate and fulfill its duties to ensure the smooth operation of the entire department. In this talk, we can observe that Petronas is contributing to the development of the country's oil industry with the aim of improving it while minimizing harm to the earth. It underscored the importance of responsible corporate contributions to industry development, instilling a sense of responsibility in all of us toward fostering sustainable progress.

In addition, Sir Roman Kvaska introduced us to software engineering, covering various types of software, their cool initiatives and also imparted the skills that a qualified software engineer should possess. In order to become a successful software engineer, skills such as analytical thinking, problem-solving skills, programming skills, productivity skills and understanding SDLC are crucial. Other than that, most of the Petronas staff have emphatically emphasized the importance of lifelong learning. Regardless of the career path we choose, lifelong learning is integral. To achieve success in our professional endeavors, continuous learning and self-improvement throughout our lives are essential.

HUAWEI



During the visit to Huawei Customer Solution Information Center (CSIS), we were exposed to Huawei's 5G solutions around the world such as Huawei Smart Classroom Solution and Huawei Smart Retail Solution. We had a chance to see the latest technologies invented in Huawei and learn how the technologies works. I realized that our daily task could be done easily and efficiently with the aid of these technology thus we can save our precious time and use it on other important activities.

In this visit, we had an opportunity to meet with Huawei IT professionals and entrepreneurs who shared their career experiences in Huawei and the challenges they met before with us. Also, we get some extra information such as the requirements to be a trainee or a staff at Huawei during the QnA session.

Lastly, we realized that lifelong learning is very important for us, especially as a Computer Science student since technology is improving everyday so we cannot stop learning new things if we do not want to be left behind. Also, it is crucial for us to foster our theoretical knowledge and practical skills as they are the most important factors that determine whether we can get a job in future.