



# UTM

UNIVERSITI TEKNOLOGI MALAYSIA

**SECP1013-09 TECHNOLOGY AND INFORMATION SYSTEM**

## **Industrial Talk Report**

**Title: Skills Required for Computer Science and Industry**

### **Group Members:**

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*Figure 1 Representative picture (Sagar, 2023)*

Prepare for: Dr. Pang Yee Yong

## **Industrial Talk (3 January 2025)**

### **Speaker's Experience**

The first speaker, Mr. Mohd Hakimi Iqmall is an information technology officer of UTMDigital. He worked for various companies and was involved in projects such as Kingdom Ran in 2018 by Okaichi Sdn. Bhd, which he worked as a game programmer. He also participated in multiple projects held by UTM Research Computing and UTMDigital from 2019 to 2024.

The second speaker, Mr. Nik Mohd Habibullah started his first job as a special officer at the Ministry of Higher Education and went back to UTM as a research officer within a year. Then, he founded his enterprise company, NI Solution and Mikro Semiconductor Sdn Bhd that contribute in hardware development and IoT technology. He introduced GetMeHired, an employment platform and DyleSIS ,a dialysis management system.

### **Skills Required for Computer Science**

Mr. Mohd Hakimi Iqmall advised students to master the fundamentals and understand the logic of programming languages. Other technical skills such as database structure and debugging system are also important for Computer Science. Faculty place higher importance on database knowledge and communication skills than industry do(Aasheim et al., 2009).

During Mr. Nik Mohd Habibullah's speech, we understood how important the fundamentals of programming techniques and project management skills are. He also briefed about important terms in system network and security such as Firewall, Encryption and VPN.

### **Skills Required by Industry**

According to Mr. Mohd Hakimi Iqmall's talk, security awareness is important to avoid crucial problems. He advised students to constantly engage with the industrial world to catch up with modern trends in industry. Students should have good communication skills to minimize gaps between programmers and clients. Some skills such as analytical and logical skills, testing and quality assurance skills and risk management should be learned by IT employees. IT managers also place more importance on leadership skills than a high overall college GPA for entry-level workers (Suhaimi et al., 2012).

Mr. Nik Mohd Habibullah mentioned that for specialized jobs, applicants must be proficient in algorithms, data structure, debugging and the ability to fix errors. He introduced IRPA method, a job application flow in 4 steps: Identify, Research, Prepare and Apply. Students must avoid red flag companies and align career goals with company. He also advised students to build a strong CV, prepare for job interviews and develop job survival skills. He encouraged students to engage in curriculum activities to gain skills aligning with their career goals. Besides, he shared business planning methods that identifies the product and service and conducts market research to assess demand.

## Reflection

### FONG JIN XUAN(A24CS0074)

From the talk, I learned about skills that are required for Computer Science and industry. This is helpful to me as I have less chance to get in touch with industrial world and understand what technology industry needs. In the next four years, I will work hard in mastering technical knowledge and equip myself with management skills to success in my future career.

### EII ZHI HUI(A24CS0246)

To succeed in computer science, I intend to master fundamental skills such as SDLC knowledge, problem-solving skills and team collaboration. I will practice regularly and participate in projects for developing proficiency in coding. These efforts are important for building industry-related skills, leading to academic success and pursuing advanced studies in computer science.

### QIAN WEN JUN(A24CS4032)

From the talk, I have gained an understanding of the challenges in the school's electronic operations and the hard work of the teachers. I also realized the importance of talent in the field of ICT. To success in the next four years, I will choose to selectively refer to GitHub and practice coding independently.

### CHEN NUO (X23EC3004)

To succeed in computer science over the next four years, I will focus on balancing technical and soft skills, such as problem-solving, teamwork, and communication. I plan to gain practical experience through internships and projects while staying updated on industry trends. By embracing a diverse and adaptable learning approach, I aim to prepare for the dynamic IT landscape.

## Reference

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- Suhaimi, M. A., Hasan, M. R., Hussin, H., & Shah, A. (2012). Information and communication technology workforce employability in Malaysia. *Campus-Wide Information Systems*, 29(2), 80–89. <https://doi.org/10.1108/10650741211212340>
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