INDUSTRIES TALK 2: BRIDGING ACADEMIC EXCELLENCE AND INDUSTRY SKILLS FOR FUTURE SUCCESS

TECHNOLOGY INFORMATION SYSTEM (07)

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1. Description of the Speaker Experience

Nik Muhammad Habibullah Bin Nik Mohd Nizam, an alumnus of Universiti Teknologi Malaysia (UTM), shares an academic and entrepreneurial journey. The UTM graduate exudes confidence matched only, perhaps, by the experiences he draws from his transition from the scholarly world to the business sector—particularly in the field of graphic design, as well as artificial intelligence. He's also dabbled in hardware development and has firsthand experience with medical management systems. He has worked on several projects; my favorite is his creation of a video montage for the UTM library, which not only got him an internship area but also inspired him to venture into entrepreneurship. Although he's not mentioned, I'll bet the inspiration behind this project was the same that drove UTM to enter a decade-long partnership with Disney. Funnily, UTM's next project was not much better: using artificial intelligence to classify library theses.

2. Basic Skills Required for Computer Science

To succeed in both academic and professional settings, computer science students must possess a combination of technical and soft abilities. On the technical side, knowledge in programming languages such as Python, Java, C++, and JavaScript is required, as well as a thorough understanding of algorithms, data structures, and SQL database management. Knowledge of operating systems, software development approaches such as Agile, and tools such as Git help to improve technical competence. Soft skills such as problem-solving, effective communication, and cooperation are also vital in technology workplaces since they enable collaboration and innovation.

4. Skills Required by Industry

In addition to these fundamental abilities, industries increasingly require specific competencies. Cloud computing experience on platforms such as AWS and Azure is in high demand, as is cybersecurity knowledge to ensure data security and regulatory compliance. Data analysis abilities utilizing Python or R, as well as knowledge of artificial intelligence and machine learning ideas, are becoming increasingly important across industries. Finally, DevOps principles are crucial to increasing efficiency and collaboration between development and operations teams. These abilities, when combined, prepare people to handle the ever-changing demands of the technology business.

3. The reflection [each student] from the talk. How you will successful in the computer science in next four year?

Kreshshale: "To succeed in computer science over the next four years, I intend to focus on developing a solid foundation in programming and data management while staying current with emerging technologies such as AI, cloud computing, and cybersecurity. I also intend to actively participate in practical projects, internships, and industry-related certifications to use my knowledge and earn valuable real-world experience."

Khalisha: “This talk resonated with me because it emphasizes the need of combining technical skills with personal development when transferring from academic to professional careers. I love its balanced approach, which addresses both job seekers and potential businesses. Inspired by the insights, I intend to improve my job preparedness by conducting research, establishing a portfolio, and considering entrepreneurship as a realistic option. It reminds me that success in IT involves not only technical knowledge but also strategic planning, adaptability, and a clear future vision.”

Wang YaPeng: “My objective for the next four years is to become a professional software developer. To attain this goal, I intend to work on software architecture, web programming, and application development in addition to improving my programming skills. I plan to broaden my skill set by researching various development tools. Active engagement in software application projects, particularly those aimed at helping the general public, will be my top priority in gaining hands-on experience and building a strong portfolio.”

Shahed: “I will be successful in computer science over the next four years because of my dedication to learning, problem-solving skills, and passion for technology. I am committed to staying curious, embracing challenges, and applying my knowledge to create innovative solutions. My ability to adapt and continuously improve will ensure I excel academically and professionally in this ever-evolving field.”

Khaireen: “In order to succeed in computer science over the next four years, I will emphasise on mastering core programming skills, understanding algorithms, and studying key areas like cybersecurity and networking. I must stay updated with industry trends and engage in projects to build practical experience. I will strive to nurture my problem-solving skills and commit to lifelong learning to adapt to technological advancements as it is ever evolving.”

4. **Reference**

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