

SECP1513: TECHNOLOGY AND INFORMATION SYSTEM

Semester II 2024/2025

REFLECTION ON INDUSTRY TALK 2 (7%)

Prepared by: GROUP 7

TITLE: University vs Industry: What Skills Really Matter?

University vs Industry : What Skill Really Matter?

Presented by : GROUP 3 (17 MAY)

Group Members:

1. ARULMURUGAN A/L SUBRAMANIYAM
2. AARON A/L RAVINDRAN
3. RADHA A/P MORGAN

Exploring the intersection between education and employment

University vs Industry: What Skills Matter

Presented by : GROUP 4 (17 MAY)

Group Members:

1. LOUIS PAUL A/L KUALIANTAISAMI
2. NOR IZA FARHANA BT ABD HAMID
3. SUNDDRA PAANDIAN A/L SINNASAMY
4. LUQMAN
5. LEAVINISH A/L BALASUBRAMANIAM

Speaker Experience

The speaker emphasized the necessity to close the gap between what is taught in universities and what the industry expects. The speaker used their journey from leaving university to being successful in the industry to highlight how in the real world, real tools and soft skills were desirable in work environments, but were vastly left out of the teaching considerations in lectures.

Basic Skills Acquired in University

University does provide a strong education based on:

- Understanding theoretical content (for example, Software Engineering, Databases).
- Programming fundamentals (Python, C++, Java, HTML/CSS, MySQL).
- Report writing and handling academic problems.
- Working in teams in a classroom.

These skills by themselves help build a knowledge base for students, but what is missing is a wide range of experience from the practical application.

Skills Required By The Industry

The industry expects a more dynamic and applied skill set:

- Ability to code in multiple languages (Python, Swift).
- Familiarity with, and able to use "Real tools" (Git, Docker, AWS, SQL/NoSQL).
- Understanding of being Agile, and capable of using Agile tools (Scrum, Jira, Trello, etc.).
- Ability to collaborate, be creative and own a project.

Where the Gaps Exist

While university courses help with the "how" and "why" there is still a lack of:

- Exposure to product focused teamwork.
- Hands-on with the tools.
- Soft skill development.

Bridging the Gap

A lot depends on what student want to do, but here are some recommendations students may want to consider:

- Getting internships and any freelance work.
- Building a GitHub portfolio.
- Take practical courses (e.g., through Coursera, HRD Corp).
- Keep practicing version control and cloud deployment.

Personal Reflections

Reflection from Aaron:

This talk provided me insight into strengthening my university knowledge in the real world. I plan to build a solid GitHub portfolio and complete a minimum of two internships over the next four years so that I have solid theory and practical experience.

Reflection from Radha:

I learned the industry values adaptability and how to use the tools every bit as much as programming skills. I plan to join open-source projects and sharpen my communication skills through tech meetups and group projects.

Reflection from Luqman:

The gap between theory and practice is substantial. I plan to close it by practicing Agile methods through simulated projects - I also plan to learn some simple tools such as Docker and AWS, even in the first year of my degree.

Reflection from Arul:

The biggest takeaway for me is the recognition that soft skills and hands-on experience matter just as much as theory. I plan to focus on developing my leadership skills and I will start looking for online certifications in cloud computing and data engineering.

Reflection by Leavinish:

I was surprised to learn about the value of soft skills and experiences versus theory. I intend to work on my leadership skills and take online training / certifications focused on cloud computing and data engineering.