INDUSTRY TALK 1

INTRODUCTION

The Industry Talk 1 session offers an in-depth look into the world of Information and Communication Technology (ICT) within the Petronas Group, a leading energy and solutions partner. This talk provided a platform for students and aspiring professionals to gain insights into the dynamic roles, technologies, and career paths in the ICT sector at Petronas. Through engaging presentations by industry experts, participants explored how ICT supports the organization's vision for innovation, sustainability, and digital transformation.

REFLECTION

Insights of the industry talk: we had an overview about Petronas Digital industry, in which our speakers highlighted the importance of creating clean renewable energy that is sustainable for the future generations.

YGP: Young Graduate Program or (YGP), is a program that hires fresh graduates in order to learn upskilling through the job. It includes various of roles such as: Software engineering, Data engineering, and Data scientist, along with the expectation of what each role need to fulfill and personal stories on individuals who have applied for the program

Overall: Along with advice from the speakers on the industry, and job market. Beside the importance of embracing changes, having life learning quality, as well as, passion for learning new technologies, developing leadership skill, and innovation.

EXECUTIVE SUMMARY

This industry talk highlighted the evolving landscape of ICT jobs at Petronas, showcasing key roles such as Software Engineering, Data Science, and Data Platform Services. The speakers emphasized the importance of collaboration, continuous learning, and adapting to emerging technologies to drive innovation and operational excellence. The session also shed light on Petronas' commitment to nurturing talent through programs like the Young Graduate Program (YGP), which prepares individuals for impactful careers in the industry. By combining technical expertise with strong problem-solving skills, Petronas leverages ICT to create efficient, sustainable solutions for the energy sector.

1 Roman Kvaska (Head of Software Engineering)

Job Scope

- Creating, improving & maintaining software
- Using technical & engineering expertise to create user-friendly products

Where Software Engineering Is Implemented

- Robotics
- Unified Control Systems
- Smart Wearable Technology
- Virtual Simulations & Connected Devices

Skills Required

- **Programming :** HTML, CSS, JavaScript, .Net(C#)
- **API & Cloud Development :** AWS, Microsoft Azure
- **Database :** MySQL, Azure SQL, MS SQL
- **Tools :** GitHub, Katalon, MS Visual Studio
- **Observability :** Dynatrace, ELK
- **Automation :** Testing, DevOps
- **Quality Assurance**

2 Ernie Yap Kian Erk (Software Engineering Executive)

Lifelong Learning

- Provides training and exam for AWS certification
- Skill development
- Learn how to deal with clients

Software Engineer Expectation

Time Management

- Prioritize tasks
- Daily stand up

Collaboration

- Work with other teams
- Shared knowledge
- Peer code review
- Team productivity

3 Khairul Nazri Lokman (Head of Data Platform Services)

Job Scope

- Collect and ingest all the data from multiple sources across the group.
- Harmonize and stored all data together
- Provide data to business user

Data engineering Roles

- Data analyst
- Data Engineering
- Big Data Engineering
- Data Quality Engineering
- Data Modeler, etc

Power BI

Qlik Q

Learning Program

1. **Instructor-led Training -** Led by global industry expertise
2. **Self-Paced Online Learning -** Microsoft ESI portal, AWS Digital Skilling, etc
3. **On-job assignment -** Hands on experience.
4. **certification -** Training and certification
5. **Skill Assessment -** Assist skill level
6. **Masterclass series -** In-dept learning

4 Nazrinakmal Najmuddin (Plan Management Services Executive)

Responsibilities

- Go on business data acquisition phase
- Understand Data and their sources
- Engage source focal anf communicate data requirements
- Work with ETL Engineer
- Verify Data enabled in Data Warehouse
- Perform Data Testing with Business

Advices

- Take advantage of online resources
- Speak up and reach for help
- Be patient and trust the process
- Give yourself a chance to learn

5 Dr Asaad Abdollahzadeh (Head of Data Science)

Job Scope

- To refine data to bring more value and business impact
- To make Data products

Where Data Science used

- Email filtering
- Self Driving cars
- Object detection (Image and video analytics)
- Text prediction or Sentence completion (Text analytics

Skills needed

- Curiosity and Learning orientation
- Math, Stats and Probability
- Programing(Python, Java etc.) Cloud, SQL, Linux
- ML, Optimization, Simulation, Computer Vision and more
- Business domain knowledge

6 M Farhan Kamaludin (Senior Data Scientist)

Skills

- **Visualization** using Power Bi
- **Develop ML Models** using Python
- **Agile**
- **Management**

Main Responsibilities

- Solution Development
- Model Development , Model Validation and Model testing
- Exploratory data analysis
- Continuous integration, deployment and maintenance

Working culture as Data Scientist

- Empowering
- Growth mindset
- Creative and Innovative
- Collaborative working
- Upskilling

OVERVIEW OF ICT JOBS IN PETRONAS DIGITAL

Anika Maliha A24CS4007
From Industry Talk 1, I gained invaluable insights into the world of ICT jobs at Petronas Digital. Beyond mastering technical skills, the key takeaway was the power of soft skills like creativity, teamwork, and effective communication. These qualities are the secret ingredients that transform tech experts into innovative problem-solvers, capable of driving collaboration and crafting impactful solutions in a dynamic digital landscape.

Mutallib Afsahov A24CS0024
From our Industry Talk 1 I understood a lot about ICT jobs in Petronas digital. The main point that I got was that in top of your your tech skills you need to have soft skills like creativity, team work and communication.

Abrar Altag Mostafa Nourelgalil A24CS0001
From this talk, I was able to gain a better on the industry that allowed me to feel more confident in my skills, which in turn, has sparked a sense of curiosity in the uture of technologies, as well as, the variety of pathways that are available.

Nurul Ain Binti Mohd Sani A24CS0172
From this talk, I gained insight into the real-life roles of ICT workers. I learned how they contribute to solving problems and driving innovation in the industry, which motivates me to further develop my skills and knowledge.

Nur Rihhadatul Arifah Binti Mohd Nazaruddin A24CS0166
This industry talk has introduced me to multiple interesting roles in this field. I also gain knowledge about the responsibilities that each roles held so I at least know what I would deal with in the near future.