

Artificial Intelligence and the Sustainable Development Goals



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Material:

<https://github.com/richieyuyongpoh/presentation>

About Me:



Dr Yu Yong Poh

**Signal and Image
Processing,
Artificial Intelligence**

**Data Science and
Analytics,
Machine Learning**

- Enterprise Data Scientist
- Academic & Industry/Corp
- Community: Malaysia R User Group
- Community: Tensorflow and Deep Learning Malaysia User Group

Personal Demo Home Page:

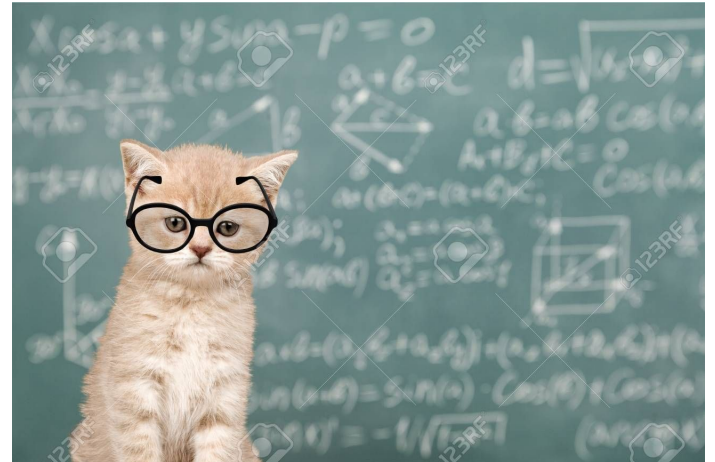


<https://www.richiegyptutorialpage.com/>

*** Open Source and Not-For-Profit Sharing / Demo**

What will be covered?

- Introduction to Sustainable Development Goals
- Introduction to Artificial Intelligence
- Roles of AI in Achieving the SDGs
- Positive & Negative Impacts of AI
- Challenges



- **Introduction to Sustainable Development Goals**
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Introduction to Sustainable Development Goals - 17 Goals & 134 Targets



Image Credits: [HERE](#)

Introduction to Sustainable Development Goals



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Introduction to Sustainable Development Goals



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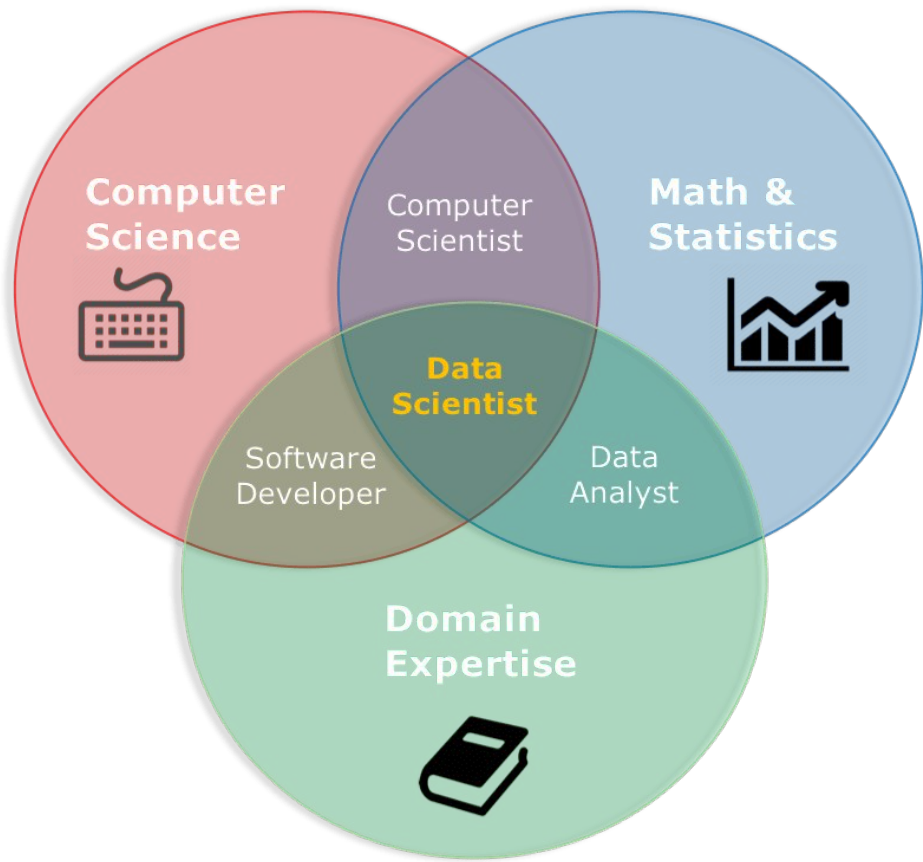
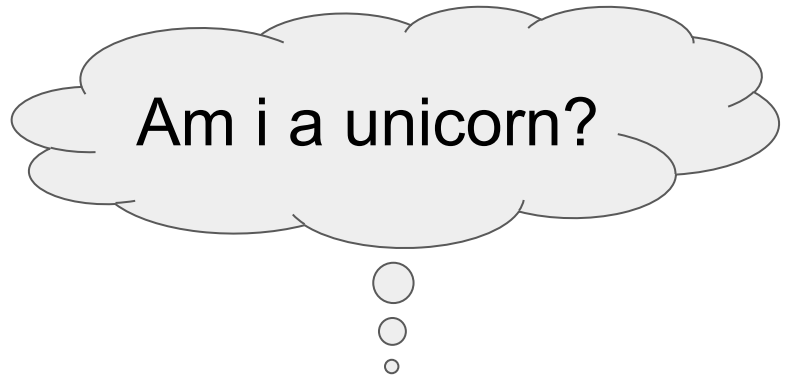


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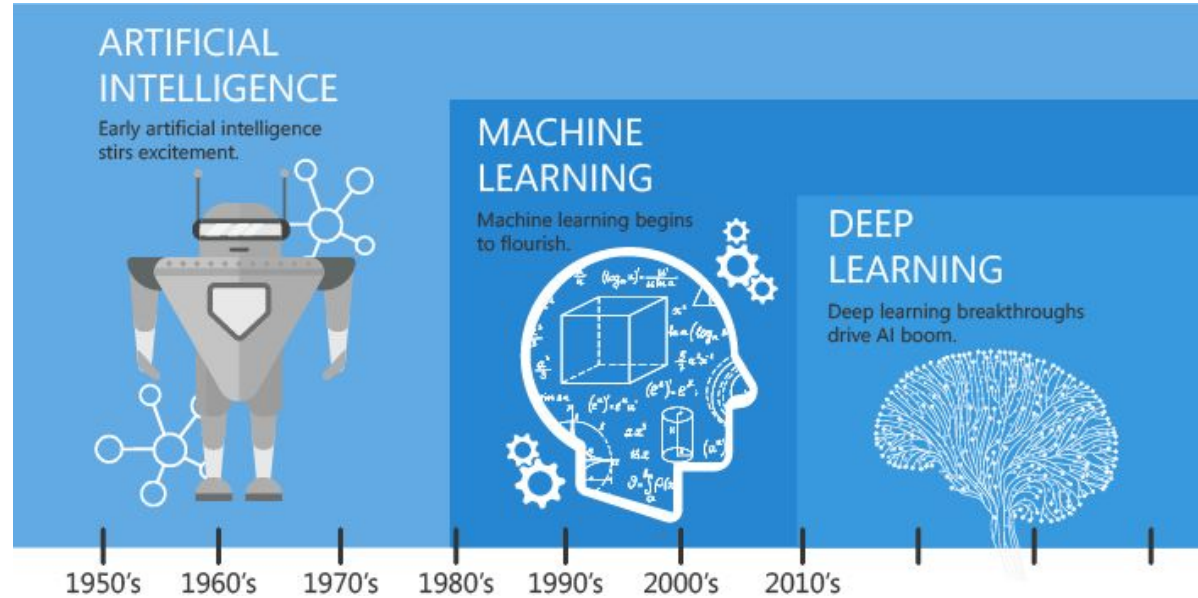


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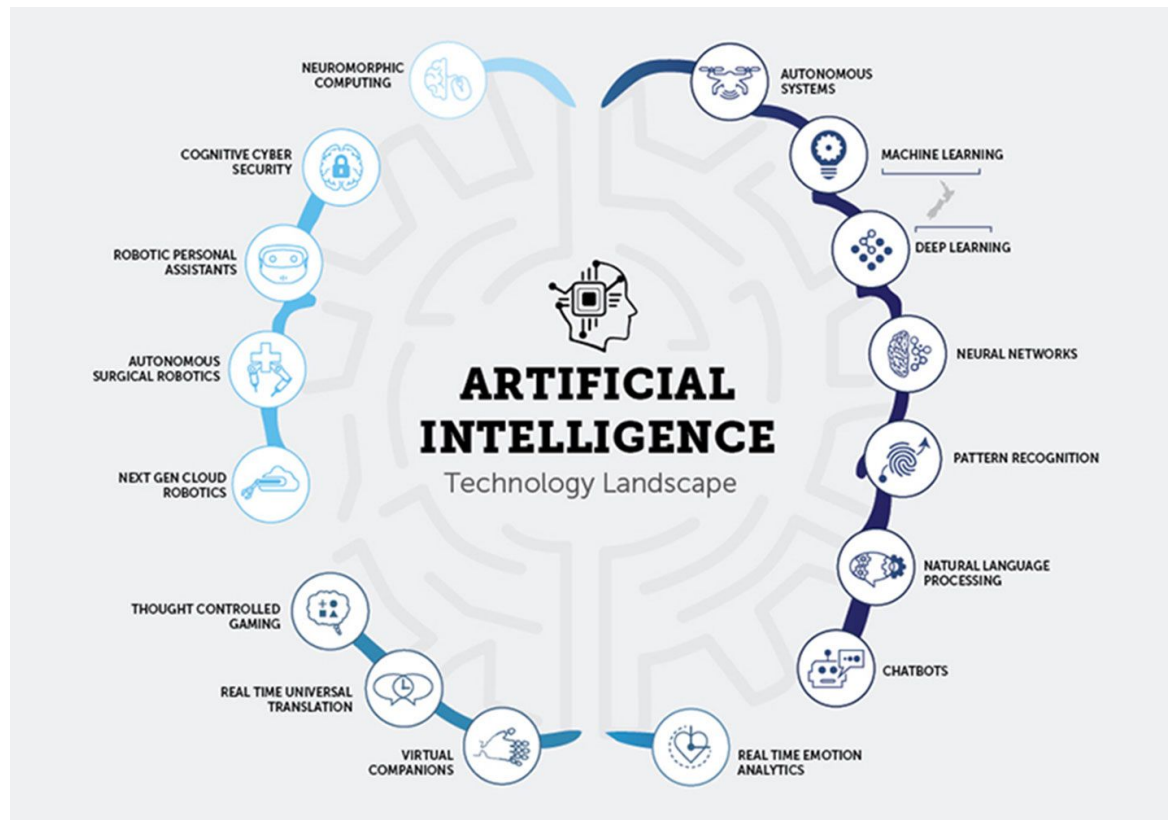


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Data, AI, ML
Berpisah tiada

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Roles of AI

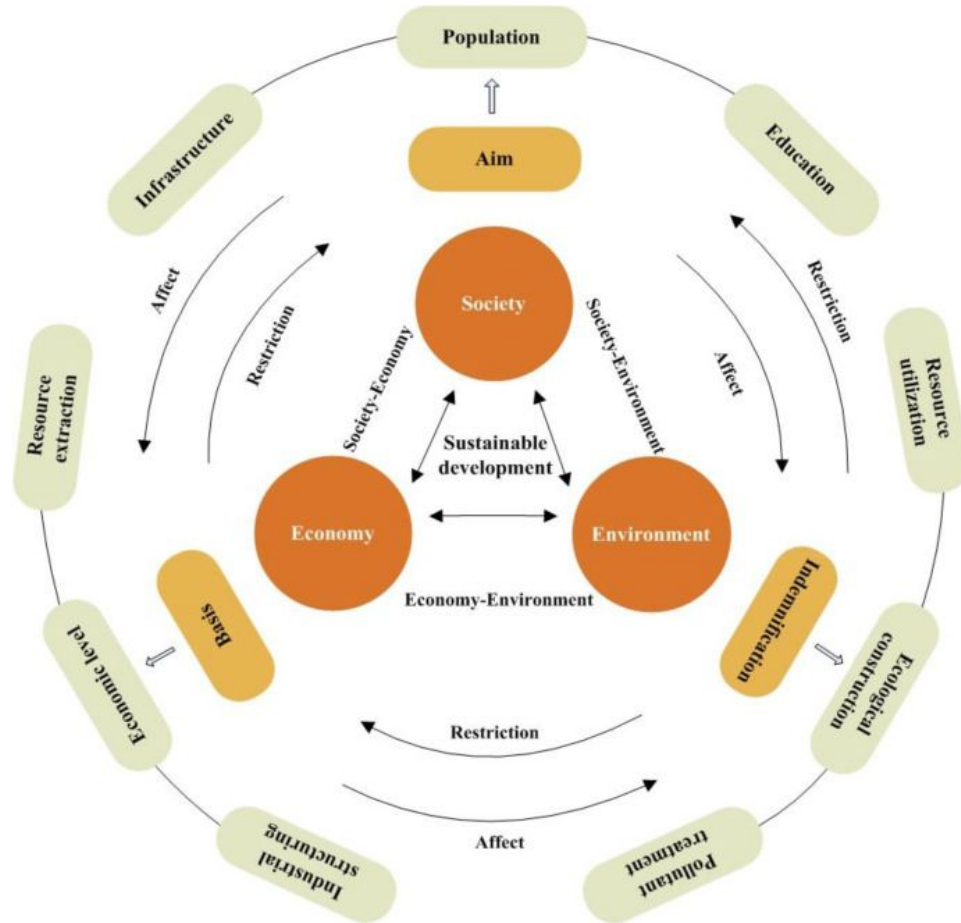


Image Credit: [HERE](#)

Roles of AI



Image Credit: [HERE](#)

Roles of AI: AI & Societal

- 82 % of targets within the Society group **could potentially benefit**
- SDG 1 - no poverty
- SDG 4 - quality education
- SDG 6 - clean water and sanitation
- SDG 7 - affordable and clean energy
- SDG 11 - sustainable cities
- etc
- Example: support **provision of food, health, water, and energy services to the population**
- Example: enable **smart and low-carbon cities**

Source: [HERE](#)

Roles of AI: AI & Societal - However...

- **38 % of the targets are impacted negatively**
- Advanced AI - Large Computation - Carbon Footprint
- Inequality & digital divide
- Threat to human rights due to AI misuse
- etc

Source: [HERE](#)

Roles of AI: AI & Societal



Source: [HERE](#)

Roles of AI: AI & Economy

- 70 % of targets within the economy group **could potentially benefit**
- Increases productivity
- Decent work and economic growth
- Increases Salaries
- etc

Source: [HERE](#)

Roles of AI: AI & Economy - However...

- **33 % of the targets are impacted negatively**
- Inequality
- Political polarization
- Biases in job recruitment & selection processes
- etc

Source: [HERE](#)

Roles of AI: AI & Economy



Source: [HERE](#)

Roles of AI: AI & Environment

- 93 % of targets within the economy group **could potentially benefit**
- Large-scale interconnected databases to develop joint actions aimed at preserving the environment
- Support low-carbon energy systems
- Reduce marine pollution
- Improve biodiversity monitoring and conservation

Source: [HERE](#)

Roles of AI: AI & Environment



Source: [HERE](#)

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Challenges & Concerns: Does AI create or destroy jobs?

- AI Creates Job Disruption But Not Job Destruction
- number who said jobs have been lost was roughly the same as the number who said that investing in AI had resulted in more jobs being created (the remaining half said it had no impact).

Source: [HERE](#)

Challenges & Concerns: Regulation

- Lack of interpretability of AI
- Data Privacy
- AI ethics

Challenges & Concerns: Cybersecurity

- Privacy
- Human Rights
- Illegal Activities

