**Practical: Artificial Intelligence (AI)**

In Data Science we process a lot data through AI. With the GDPR, it is becoming increasingly important to understand the ethics behind the data that is collected, stored, processed and evaluated.

**1) Find out what Responsible AI is?**

[What is Responsible AI? - PwC UK](https://www.pwc.co.uk/issues/data-analytics/artificial-intelligence/what-is-responsible-ai.html)

Organisations globally are recognising the framework for responsible AI,

* Create transparent, explainable and provable AI models
* Create systems that are ethical, understandable and legal
* Boost AI security with validation, monitoring, verification
* Improve governance with AI operating model, processes
* Test for bias in data, models, human use of algorithms

**2) Find instances where AI has failed? Or been used maliciously or incorrectly.**

Reported by Reuters, Amazon.com machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.

That is because Amazon’s computer models were trained to vet applicants by observing patterns in resumes submitted to the company over a 10-year period. Most came from men, a reflection of male dominance across the tech industry.

Gender bias was not the only issue. Problems with the data that underpinned the models’ judgments meant that unqualified candidates were often recommended for all manner of jobs, the people said. With the technology returning results almost at random, Amazon shut down the project, they said.

**3) Implications of when AI fails. There is a specific article in the GDPR Law that covers this, especially with automated decision making. (Opt. in and out options).**

The UK GDPR has provisions on:

* automated individual decision-making (making a decision solely by automated means without any human involvement); and
* profiling (automated processing of personal data to evaluate certain things about an individual). Profiling can be part of an automated decision-making process.

<https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/automated-decision-making-and-profiling/what-does-the-uk-gdpr-say-about-automated-decision-making-and-profiling/>

**4) What should organisations do to ensure that they are being responsible with AI and the wider use of data in general?**

[3 ways organisations can use AI in a responsible way - Microsoft UK](https://cloudblogs.microsoft.com/industry-blog/en-gb/cross-industry/2020/01/08/3-ways-organisations-can-use-ai-in-a-responsible-way/)

1. Establishing internal governance, for example by an objective review panel, that is diverse and that has the knowledge to understand the possible consequences of AI infused systems. A key success factor is leadership support and the power to hold leadership accountable.
2. Ensuring the right technical guardrails, creating quality assurance and governance to create traceability and auditability for AI systems. This is an important part of every organisation’s toolkit to allow operational and responsible AI to scale.
3. Investing more in their own AI education and training so that all stakeholders – both internal and external – are informed of AI capabilities as well as the pitfalls.

(Maximum 500 words)