

Data Ethics



**ACCELERATE
PROGRAMME**
FOR SCIENTIFIC DISCOVERY



Your challenges around AI and data

*What are some of your challenges around using
AI models and data...?*

General Challenges of Ethics in AI

- Traditional research ethics may not be well suited to AI applications
 - Research Ethics Committees typically deal with biomedical, and human subject oriented research. The relationship between researchers and subjects is different to the relationship between researchers and data.
- The changing landscape of AI
 - The rapidly shifting landscape of AI/ML is challenging to keep up with. We run the risk of not being able to adapt ethical frameworks quickly enough.
- Multi-site and multi-organization collaborations
 - A significant amount of research now involves collaborations between multiple research groups and potentially with private organization. This can lead to conflicting standards of ethical review.
 - Reliance on external private organization (e.g. for compute resources) exposes you to ethical risk.

General guidelines

- **Do No Harm**
 - Try not go beyond what is necessary to achieve a specific aim. Risk assessment should be used to prevent harms.
- **Safety and Security**
 - Vulnerabilities to attack should be addressed.
- **Privacy and protection**
 - Privacy must be protected throughout, and adequate data protection frameworks should be established.
- **Accountability**
 - All systems should be auditable and traceable.
- **Transparency and explainability**
 - The level of transparency and explainability should be appropriate so as not to conflict with privacy and safety.
- **Human-in-the-loop**
 - AI systems should never replace human responsibility and accountability.
- **Sustainability**
 - Assess the impact of your research on the environment.
- **Awareness**
 - Public understanding of AI and data should be promoted wherever possible
- **Fairness**
 - Research should promote social justice, fairness, non-discrimination, and inclusivity.

Resources

[The dangers of using proprietary LLMs for research](#)

[Framework for responsible research and innovation](#)

[UNESCO Ethics of Artificial Intelligence](#)