

Question:

How are foundation models regulated, if at all?

Answer:

Foundation models are currently largely unregulated. There are a few reasons for this:

- Foundation models are an emerging technology and regulatory agencies are still trying to understand their capabilities, limitations, and societal impact. It often takes time for regulations to catch up with technological progress.
- Foundation models themselves are not directly deployed to users, rather they are adapted and embedded within applications. Regulating the foundation models themselves may be challenging without a clear application context.
- There are concerns about overregulation stifling innovation with a technology that could have many benefits if developed and applied responsibly. However, underregulation also poses risks if not addressed proactively.
- There are open questions around how to regulate AI technologies like foundation models that are data-driven, emergent, and opaque. Traditional approaches to regulation may need to be rethought.
- There are disagreements over who should regulate foundation models - government agencies, independent auditors, or some combination. Self-regulation by tech companies is also an option but has limitations.

Some broader AI regulation efforts that could encompass foundation models include:

- The EU General Data Protection Regulation (GDPR) provides some constraints on how data can be collected and used to train machine learning models.
- The EU AI Act proposes risk-based regulations for high-risk AI applications that could include those powered by foundation models.
- Various algorithmic accountability and transparency laws aim to address bias and unfairness, which could apply to applications of foundation models.
- Proposals for oversight boards and regulatory sandboxes aim to balance innovation and responsible development.

However, foundation model-specific regulation and governance frameworks are still limited. Developing appropriate, flexible, and forward-looking policies and best practices should be a high priority as foundation models become more widely deployed. Overall, regulation of foundation models is an open challenge that will require interdisciplinary collaboration and an emphasis on ethics and social benefit.