

MS AI software development guided by 6 principles

- Ensures the provisioning of solutions and minimise unintended negative consequences
 - Fairness
 - Reliability & safety
 - Privacy & Security
 - Inclusiveness
 - Transparency
 - Accountability

Understand, protect, and control your data, models, and processes to build trusted solutions

- State-of-the-art technology enabling responsible ML development, deployment, and use.
- Responsible AI allows ML to be understandable & cultivates trust instead of it being a 'black box'



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AI-900 version: October 2021

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Principles

Concepts

In Depth



Azure Responsible AI Principles

- Fairness:** Treat all people fairly without bias/discrimination with regards to opportunities, resources, and information. Mitigated through interpretability and explainability of the model (Sociotechnical challenge)
- Reliability & safety:** Does not cause harm, preferably even during failure or quantifies potential risk/harm. Mitigated through rigorous testing and development management.
 - Track and document ML process (datasets, models, code ect)
- Privacy & Security:** Secure sensitive information and respect privacy. Mitigated through running model on user devices or using anomaly detection on systems.
 - Encrypt data, create noise to keep data confidential
- Inclusiveness:** Empower and engage everyone. Mitigated through including diverse perspectives during model development.
- Transparency:** Understandable; why was it created, how it works and what its limitations are. Mitigated through interpretability of the models.
 - Understand model behaviour and features that impact predictions
- Accountability:** Who is accountable for the system and its results. AI created in a framework of clear governance, ethical and legal standards.

