

AI Ethical Risk Assessment Framework

A structured approach to evaluating and ranking AI-related risks.

1. Risk Evaluation Criteria

- **Severity:** How serious is the potential harm? (1-5)
- **Likelihood:** How probable is the harm occurring? (1-5)
- **Reversibility:** Can the damage be undone? (1=Permanent, 5=Easily Reversible)
- **Population Impact:** How many individuals are affected? (1-5)

2. Weighted Risk Score Formula

This formula ensures high-severity and irreversible risks are prioritized.

$$\text{Risk Score} = (\text{Severity} \times 0.4) + (\text{Likelihood} \times 0.3) + ((6 - \text{Reversibility}) \times 0.2) + (\text{Population Impact} \times 0.1)$$

3. Risk Ranking Table

Risk Scenario	S	L	R	P	Score	Priority
Loss of Human Life	5	3	1	5	4.4	Critical
Systemic Bias / Discrimination	4	5	2	5	4.4	Critical
Trust Erosion	4	5	2	4	4.3	Critical
Legal / Regulatory Liability	3	3	4	3	2.8	Medium

4. Priority Interpretation

4.0 – 5.0 Critical	3.0 – 3.9 High	2.0 – 2.9 Medium	< 2.0 Low
------------------------------	--------------------------	----------------------------	------------------------