Futuristic Proposal (10%)

- **Prompt**: Propose an **AI application for 2030** (e.g., AI-powered climate engineering, neural interface devices).
- **Requirements**:
    - Explain the problem it solves.
    - Outline the AI workflow (data inputs, model type).
    - Discuss societal risks and benefits.

Title: *AI for Climate Resilience: Predicting and Preventing Food Crises in 2030*

Problem It Solves: Climate change is intensifying droughts, floods, and crop failures. By 2030, millions could face food insecurity. This AI system predicts climate-driven agricultural risks and recommends adaptive strategies for farmers and governments.

AI Workflow:

- **Data Inputs:** Satellite imagery, weather forecasts, soil sensors, crop yield records
- **Model Type:** Hybrid deep learning model combining CNNs (for image data) and LSTMs (for time-series forecasting)
- **Output:** Risk maps, crop recommendations, early warning alerts

Benefits:

- Helps farmers make climate-smart decisions
- Supports governments in disaster planning
- Reduces food waste and improves global food security

Societal Risks:

- Over-reliance on AI may reduce local knowledge use
- Data privacy concerns with satellite and farm-level data
- Risk of excluding smallholder farmers without tech access

Mitigation Strategies:

- Ensure community involvement in model design
- Use open data and transparent algorithms
- Provide mobile-friendly interfaces for rural users