

# Task 1: Research & Summary

## What is SORA?

SORA is an advanced AI model developed by OpenAI that can generate high-quality, realistic videos from simple text prompts. Built to understand not only the visual components of scenes but also how they evolve over time, SORA can create video clips up to a minute long with coherent motion, context-aware object interactions, and dynamic changes in camera angles and lighting. SORA stands out for its ability to simulate real-world physics and continuity, making it suitable for storytelling, simulation, and creative media production.

## Comparison with DALL·E, Pika Labs, and RunwayML

- **DALL·E:** DALL·E, also by OpenAI, is designed for generating static images from text prompts. While it can produce photorealistic or stylized images, it lacks the temporal understanding and motion capabilities that SORA offers. DALL·E is often used for prototyping, illustration, and concept art.
- **Pika Labs:** Pika focuses on video generation with an emphasis on creative animation and visual effects. It offers intuitive tools for customizing motion, scene transitions, and style, making it appealing to creators without technical backgrounds. However, SORA's outputs tend to be more realistic and physics-aware.
- **RunwayML:** RunwayML offers a suite of AI tools including video generation via models like Gen-2. It excels in accessibility and integrates easily into creative workflows. Compared to SORA, RunwayML emphasizes user control and multi-modal features (e.g., video editing, style transfer), though SORA may deliver

higher fidelity outputs in some use cases.

## Ethical Considerations in Video Generation

The rise of generative video AI presents multiple ethical concerns:

- **Deepfakes & Misinformation:** Realistic video generation could be misused to fabricate events, posing risks to public trust and security.
  - **Consent & Copyright:** AI-generated content might unknowingly mimic real individuals or copyrighted works, raising questions about authorship and digital identity.
  - **Bias & Representation:** Training data biases can result in stereotypical or exclusionary content, especially if diverse cultural or demographic contexts are underrepresented.
  - **Environmental Impact:** Training large models like SORA requires significant computational resources, contributing to carbon emissions.
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## Task 2: Prompt Engineering Practice

### 1. Education:

*"A 15-second animation showing the process of water evaporating from a leaf, condensing into clouds, and falling as rain in a continuous cycle."*

**2. Entertainment:**

*"A magical forest where trees come to life and dance under a full moon, glowing with bioluminescent leaves."*

**3. Environment:**

*"A time-lapse of a polluted city transforming into a green, sustainable urban space with solar panels, bike lanes, and tree-lined streets."*

**4. Technology:**

*"An evolving timeline showing the transformation of a room from the 1950s to a futuristic smart home in 2050."*

**5. Social Awareness:**

*"A 10-second video of a child planting a tree, followed by a fast-forward of the tree growing tall while the city develops around it."*

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## **Task 3: AI + Creativity Simulation**

**Chosen Role: Educator**

**Topic: How AI Works**

**SORA Video Concept: "How AI Thinks: Inside a Neural Network"**

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**Prompt:**

*"A 15-second animation showing a glowing digital brain, data flowing through interconnected neurons, visualizing how an AI model*

*processes text, learns from examples, and generates an output like a poem or image."*

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## **Scene-by-Scene Breakdown:**

### **Scene 1 (0–3s)**

- View zooms into a futuristic, glowing brain made of digital circuits.
- Voiceover: "AI starts by mimicking how the human brain processes information."

### **Scene 2 (3–7s)**

- Data points (e.g., numbers and words) flow through colorful neural pathways, lighting up connections.
- Voiceover: "It learns patterns by passing information through layers of artificial neurons."

### **Scene 3 (7–12s)**

- The brain forms a glowing image (e.g., a cat or a short poem) as the data converges.
- Voiceover: "After training on large datasets, AI can recognize images, answer questions, or even create art."

### **Scene 4 (12–15s)**

- Final screen: a child types “Make a poem about the stars” into a holographic screen, and the AI instantly responds.
  - Voiceover: “It’s not magic—it’s machine learning!”
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### **Practice Activity (Simulated Without SORA):**

#### **1. Use DALL·E to create:**

- Digital brain image
- Flowing neural data lines
- Final output (poem or image being formed)

#### **2. Tools:**

- **CapCut** or **Canva** to sequence keyframes
- Add voiceover narration (as written above)
- Overlay with animated text or particle transitions