

Analyzing and Developing Responsible Guidelines for Generative Image AI Tools

Project Objectives

1. **Tool Analysis:** Compare two popular generative image AI tools in terms of their functionality, accessibility, and potential for misuse.
2. **Identify Unethical Uses:** Assess and document scenarios where these tools could be misused, such as for misinformation, deepfakes, privacy invasion, or unauthorized manipulation.
3. **Develop a Responsible Use Guide:** Based on findings, create a set of guidelines for ethical and responsible use of generative image AI tools, targeting both users and developers.

Phases of the Project

Phase 1: Tool Selection and Familiarization

1. **Select Tools:** Choose two generative image AI tools with significant usage and accessibility, such as OpenAI's DALL-E and Canva's Dream Lab.
2. **Functionality Overview:** Document each tool's features, input/output formats, content filters, and user interface.
3. **Usage Policies Review:** Investigate each tool's terms of service, ethical guidelines, and safety protocols, focusing on limitations in place to prevent misuse. Identify training datasets used for AI model.

Phase 2: Identification of Unethical Use Cases

1. **Scenario Development:** Identify and document potential cases of misuse, including but not limited to:
 - Creation of deepfakes for disinformation
 - Unauthorized use of real individuals' likenesses
 - Generation of harmful, biased, or inappropriate content
2. **Experimentation:** Test the tools within ethical and safe limits to observe the ease of generating such images and analyze built-in safeguards.

3. **Data Collection:** Record instances where the tool's content filters fail or successfully block misuse, highlighting gaps in current protection measures.

Phase 3: Ethical Analysis

1. **Framework Comparison:** Compare results against existing ethical frameworks, such as the IEEE's guidelines for ethical AI use, and general responsible innovation principles.
2. **Stakeholder Impact Assessment:** Identify stakeholders (artists, users, developers, organizations, public) and assess how unethical use could impact each group.

Phase 4: Development of a Responsible Use Guide

1. **Guideline Formation:** Use insights develop a guide with:
 - Best practices for users and developers to avoid unethical use
 - Recommended enhancements for tool developers to increase safeguards
 - Tips for organizations on responsible AI deployment
2. **Format:** Create a concise document with guidelines, visuals, and scenario-based examples of ethical vs. unethical use.

Phase 5: Create Guidelines and Finalize Report

1. **Create Guidelines:** Create a simple, front end website to display findings for responsible use from findings.
2. **Finalize Report:** Compile all information into a final report and complete presentation.

Expected Outcomes

- **Detailed Analysis:** Comprehensive comparison of two generative image AI tools and their vulnerabilities to unethical use.
- **Responsible Use Guide:** A practical guide for users, developers, and organizations outlining best practices for ethical image generation with AI.
- **Recommendations:** Concrete suggestions for developers and users to implement additional safeguards.

This design allows a structured, ethically sensitive approach to assessing the risks of generative image AI tools while creating resources to encourage responsible use.