


QUICKSCAN CANVAS That uses Tripo and OpenAI to generate 3D models from text prompts in a browser


NAME: Morph3D a tool that uses Tripo and OpenAI to generate 3D models from text prompts in a browser.



DATE: July 1, 2025 10:29 PM


DESCRIPTION OF TECHNOLOGY
Morph3D allows users to input a short prompt and receive a generated .glb 3D model. It combines AI-driven prompt enhancement and Tripos 3D generation API. The tool is fast, browser-based, and made for creative prototyping.

HUMAN VALUES




Morph3D empowers users to create digital assets easily, which can enhance their identity as designers or creators. It fosters creativity, accessibility, and personal expression. It does not impose a worldview, but the use of styles (e.g., "Barbie", "Venom") might carry aesthetic biases. Users are not stigmatized, and the technology aligns with a creative, futuristic identity.

TRANSPARENCY




The README and UI make it clear that Morph3D uses Tripo for model generation and OpenAI for prompt enhancement. No commercial model is implemented in the prototype, and API usage is done transparently via environment variables. Further improvements could include in-app documentation or tooltips.

IMPACT ON SOCIETY



Creating 3D models traditionally requires technical skills, expensive software, and time-consuming workflows. This limits accessibility for designers, students, and creative individuals who want to prototype or visualize concepts quickly. Morph3D lowers this barrier by allowing users to describe an idea in natural language and instantly receive a usable 3D model. This problem is real and widely acknowledged in creative and educational domains, where 3D content is increasingly important.

STAKEHOLDERS




- Students in multimedia or game design
- Hobbyist 3D creators
- Indie game developers
- Educators using 3D models in STEM/art subjects
- AI researchers or rapid prototyping teams

Less direct stakeholders:


- Tripo API and OpenAI API providers
- Teachers grading AI projects
- 3D content distribution platforms

SUSTAINABILITY




The application itself runs locally in a browser, consuming minimal client-side resources. However, the backend relies on cloud-based APIs that incur computational cost. The use of enhanced prompts slightly increases API calls, but these are optimized by avoiding duplicate generations. Tripo and OpenAI run on high-performance data centers, so efficiency depends on their infrastructure.

HATEFUL AND CRIMINAL ACTORS




While Morph3D does not intentionally support unlawful behavior, it could be misused to create 3D models of copyrighted or restricted objects, or to generate inappropriate or offensive models. Furthermore, bad actors could embed malicious content into models and use them in phishing or impersonation. The backend relies on Tripo's filtering to mitigate such misuse.

DATA




Yes. Prompt-based generation is prone to ambiguity and hallucination. The enhanced prompts (via GPT-3.5) might inject unintended biases or assumptions. Moreover, the underlying models (Tripo/OpenAI) are trained on large datasets that may carry historical, cultural, or representational biases.

FUTURE




If adopted widely, Morph3D or similar tools could democratize 3D content creation, impacting fields like education, game development, AR/VR, and design. However, it could also lead to over-saturation of low-quality 3D models or raise ethical issues regarding automated content generation (deepfakes, IP theft, etc.). Strong moderation, transparency, and creative attribution will be crucial as such tools scale.

PRIVACY



No personal data is collected by Morph3D. The system only uses non-identifiable prompt text input for processing via OpenAI and Tripo APIs. No account system or tracking is implemented. However, indirect profiling may be possible via third-party APIs if used outside GDPR-regulated environments.




INCLUSIVITY



Yes, in some form. The quality and style of the generated models are influenced by the training data of Tripo's 3D model generator. Certain object types or cultural elements may be more represented than others, potentially leading to underrepresentation or stereotyping in less common prompts.


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HUMAN VALUES




How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...


TRANSPARENCY



Is it explained to the users/stakeholders how the technology works and how the business model works?

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...


IMPACT ON SOCIETY



What is exactly the problem? Is it really a problem? Are you sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...


STAKEHOLDERS



Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by...

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.
...


SUSTAINABILITY



In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?


HATEFUL AND CRIMINAL ACTORS



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...

DATA




Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts;
- Data collections are often biased;...


FUTURE



What could possibly happen with this technology in the future?

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?


PRIVACY



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

INCLUSIVITY



Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....

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