

Harem

Technology and Token Lite Paper

TL;DR

Harem has built an AI that creates girls from nothing, who can be Deepfaked into videos of your choice. Buying 1 \$HAREM gives you a guaranteed discount when you API call our server to create video Deepfakes starring any of our girls at a price of 1 \$USDT per minute of video, so you get to create infinite and varied content at a price that no human creators on earth could possibly match. Discounts increase the more \$HAREM you have in your wallet at the time of the API call. There are also staking rewards, but those are detailed in a separate document.

Abstract:

- The process of creating content currently involves the use of human actors and actresses.
- Thanks to advances in machine learning, the involvement of human actors and actresses in the content creation process is no longer necessary.
- Harem is training a machine learning algorithm to create virtual people who can replace costly humans in the content creation process, and enabling the decentralized monetization of its algorithm through a token offering.
- Each \$HAREM holder receives a discount when using Harem's algorithm to Deepfake our girls into the video of their choice.

Introduction to Harem's Algorithm and Deepfake Technology:

Harem's Algorithm:

Harem's custom trained machine learning algorithms are already capable of creating photorealistic content of women who do not exist. Currently our algorithm is capable of generating torso or full body photos of these women, as well as generating them with or without basic clothing items such as panties. Several samples of these photos can be found below.

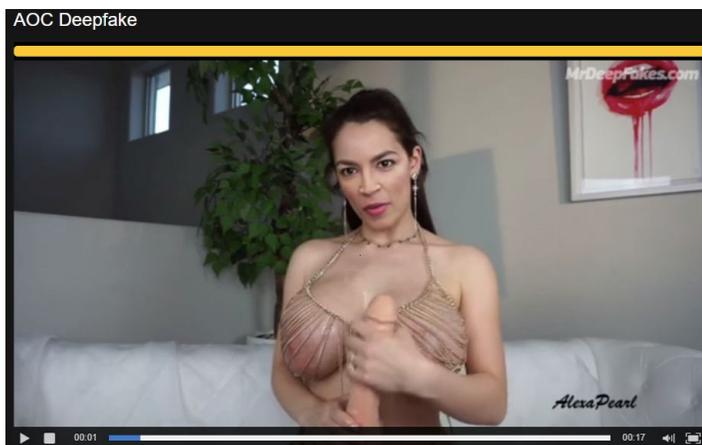


Harem’s algorithm can also create photorealistic Deepfakes of its models in some videos as well. A demonstration of our Deepfake capabilities can be found at the following link: [Click Here](#). Our video capabilities have been consistently improving since the authoring of this paper, and we encourage readers to check out our official social media channels and our “What We’ve Built” page on our website.

Deepfake Technology:

Deepfakes are videos in which the face of a person in an existing image or video is replaced with another person’s face. The end result is a video of a person doing something that they did not do. This has already been widely adopted in the porn industry with websites such as MrDeepfakes.com leading the way.

One of the ethical issues with Deepfakes is that they often feature people who would not consent to having their face used in the video being created. An example of this can be seen here in a [Deepfake](#) which has overlaid US House Representative Alexandria Ocasio-Cortez into a video of porn star Alexa Pearl. Harem believes one way to reduce the prevalence of Deepfakes being used to create videos of people who do exist, is to provide a high quality alternative for the technology that centers on people who do not exist.



\$HAREM:

\$HAREM Functionality:

\$HAREM owners receive significant discounts when using Harem’s algorithm to Deepfake models from the Public Harem¹ into the videos of their choice. All users will have to pay a “per-minute of created content” fee to cover server costs, however \$HAREM owners will receive a sliding scale discount based on how many \$HAREM are in their wallet at the time of use. Users with 1 \$HAREM will receive a 10% discount compared to the standard per-minute charge, users with 100 or more \$HAREM will receive a 50% discount, and users with 1,000 or more \$HAREM will receive a 75% discount.²

Per-minute Deepfake creation prices will fluctuate based on cost, bandwidth, and demand. Moore’s law and inflation are both relevant factors, which make long term price prediction ultimately

¹ The “Public Harem” is a collection of all the non-exclusive AI generated girls that \$HAREM holders will be able to Deepfake into videos. At first, the vast majority of girls available for Deepfaking will be in the Public Harem. However as staking becomes more popular, and more NFT generated girls are made available by their owners for Deepfaking, the Harem team’s goal is to eventually have 90% of the girls available for Deepfaking be NFT generated. More details on this can be found in the lock-up reward document on the DYOR web page.

² These discounts will be calculated in reference to the per-minute prices paid by non-holders.

impossible. The Harem team will address server costs with a long term goal of bringing prices down to approximately 1 \$USDT per minute of created video. The process for \$HAREM holders to create a Deepfake is be the following:

1. Sign in through Metamask.
2. Pre-pay however many minutes worth of content you want into your account using \$ETH. Even if you don't use all those minutes now, they are linked to your wallet and you can use them later. If you have \$HAREM in your wallet, your discount is automatically applied.
3. Upload a video of your choice to the Harem [website](#).
4. Select one of our AI generated girls from the Public Harem to Deepfake into your video.
5. Purchase your video creation.
6. Receive your video by email 24-48 hours later.

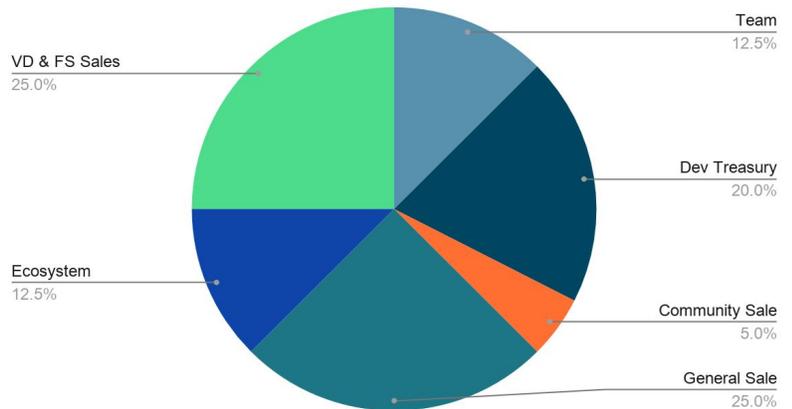
Users are free to do whatever they like with the videos they create. They can create their own website to host and monetize the videos, upload them to an existing streaming website and monetize them there, or just use them for their own personal enjoyment. The decision is entirely up to them, and it always will be.

Long term Harem plans to offer full novel video creation from scratch, however this will take quite some time to develop, whereas initial Deepfake capabilities are already built and will only improve with time.

Token Distribution:

- Fixed supply of 100,000 \$HAREM.
- Team Allocation allocation of 12.5% of total supply (12,500 \$HAREM³).
- Dev Treasury Fund of 20% of total supply (20,000 \$HAREM⁴).
- Ecosystem Fund of 12.5% of total supply (12,500 \$HAREM⁵).
- Community Sale of 5% of total supply (5,000 \$HAREM).
- General sale of 25% of total supply (25,000 \$HAREM).
- Video Deepfake and Full Body sales of 25% of total supply (25,000 \$HAREM).

Token Distribution



³ Team tokens are locked with 7.5% (937.5 \$HAREM) unlocking every financial quarter (3 months) after the pre-sale tokens unlock.

⁴ Locked with 2.5% (500 \$HAREM) unlocking every month after the pre-sale tokens unlock. The team will make available monthly reports on the use of all Dev Treasury Funds.

⁵ Locked with 2.5% (937.5 \$HAREM) unlocking every month after the pre-sale tokens unlock.

Public Sale:

The public sale will launch in two phases; Community sale and General sale. The Community Sale will consist of 5% of \$HAREM token supply (5,000 \$HAREM). It will be sold at a starting price of 0.02 \$ETH per \$HAREM, to the first 100 members of the official Harem telegram (t.me/haremofficial) with a minimum buy in of 25 \$HAREM. Community Sale tokens will be held until the last day of the Public Sale, at which point they will be sent to buyers at a rate of 25% per week. If not all tokens in the Community Sale are sold within 14 days, the remainder will be folded into the General Sale.

The remaining General Sale tokens will be sold with a starting price of 0.025 \$ETH per token. The General Sale will begin one month after the end of the Community Sale. Tokens will be locked through Lock.Finance until on or about January 5th. At the end of the General Sale, 15 ETH from the General Sale and a corresponding amount of \$HAREM⁶ will be added to the Uniswap LP. Any remaining General Sale tokens will be folded into the Video Deepfake and Full Body Sales funds. Once the General Sale is complete the FEA, Dev Treasury, and Ecosystem tokens will be locked so they can begin their unlocking schedule.

For the purpose of clarity, the order of events is as follows:

1. Harem team begins Community Sale. Sold tokens are held until the end of the Public Sale.
2. 1 month of waiting.
3. Harem team begins General Sale. Tokens sold in the General Sale are locked through Lock.Finance to unlock on or about January 5th.
4. January 5th the Harem team uses 15 ETH from the General Sale and the appropriate amount of \$HAREM per footnote 6 to form the Uniswap LP from which staking rewards can be derived.
5. January 5th, General Sale ends and tokens are sent to buyers.
6. Community Sale tokens start vesting at 25% per week.

Video Deepfake Sale:

The Video Deepfake Sale will begin after Harem has successfully improved its Video Deepfake (specifically facial deepfake) technology to the point where it is ready to be made available not for free as a beta, but at cost as a sufficiently developed and high quality product. While there is no exact line in the sand, as a general rule the Harem team will be looking to get to the point where its Video Deepfake can be used on a random sampling of 12 porn videos and the results have noticeable error rates of less than 5% (measured by how many seconds out of the overall video contain a noticeable error, not including errors caused by occlusion).

10% of the \$HAREM allocation for this sale will be automatically distributed to Golden Ticket NFT holders upon them burning their NFT (see our staking rewards paper for more information). The

⁶ Such that the ratio in the LP is 0.035 ETH per HAREM.

remainder will be made available for sale to any Community or General Sale participants at a 10% discount to trading price on Uniswap at the time of the opening of the Video Deepfake Sale.

Full Body Sale:

The Full Body Sale will begin when Harem is able to demonstrate a working beta of its full body deepfake product. For the purpose of clarity, a beta will be considered working when it can demonstrate at least a ten second video showing the successful transference of limb, torso, and head placement and movement from a video actress to one of Harem's AI generated full body models through deepfaking the Harem model into the video. This transference does not need to be 'clean' or high quality, but merely showcasing similar movements successfully being transferred.

10% of the \$HAREM allocation for this sale will be automatically distributed to Golden Ticket NFT holders upon them burning their NFT (see our staking rewards paper for more information). The remainder will be made available for sale to any Community or General or Video Deepfake Sale participants at a 10% discount to trading price on Uniswap at the time of the opening of the Full Body Sale. Any unsold \$HAREM at the end of the sale will be immediately distributed equally among the Dev Treasury and Ecosystem Funds.

Ecosystem Fund:

The Ecosystem Fund is a general purpose slush fund designed to reward community participants for Bounties. These Bounties may include but are not limited to;

- Creating and/or distributing promotional content, such as Memes.
- Creating and providing Harem the license to use content, including but not limited to;
 - Custom drawn Deepfakable Anime Girls who can be included as part of the Public Harem or given away as an NFT as lock up rewards (see Reward Type 4 in the below linked paper under "Lock-Up Reward NFTs").
 - Template porn videos which Harem girls can be Deepfaked into.
- Performing data labelling, scraping, or sorting jobs per instruction by the Harem team.