# 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.







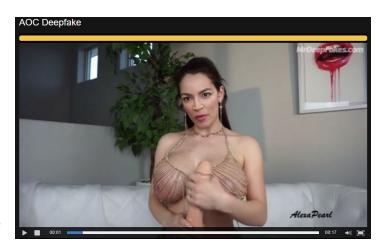


Harem's algorithm can also create photorealistic Deepfakes of its models in some videos as well. A demonstration of our Deepfake capabilities can be found at the following link: <u>Click Here</u>. Our video capabilities have been consistently improving since the authoring of this paper, and w encourage 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 <u>Deepfake</u> 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

<sup>&</sup>lt;sup>1</sup> The "Public Harem" is a collection of all the non-exclusive Al 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 Depefaking, 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.

<sup>&</sup>lt;sup>2</sup> 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 will be the following:

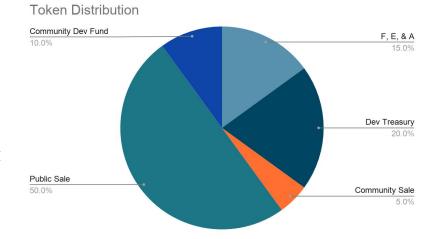
- 1. Sign in through Metamask to confirm you are an \$HAREM owner in order to access Deepfake creation.
- 2. Pre-pay however many minutes worth of content you want into your account using \$HAREM, \$BTC or \$ETH. Even if you don't use all those minutes now, they are linked to your wallet and you can use them later so long as you still own 1 \$HAREM.
- 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. Select the timeframe of the video you wish to Deepfake your girl into (for example, from 1:30 in to 5:00 in).
- 6. Download your video.

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.
- Founders, Employees, and Advisers allocation of 15% of total supply (15,000 \$HAREM<sup>3</sup>).
- Dev Treasury Fund of 20% of total supply (20,000 \$HAREM<sup>4</sup>).
- Community Development Fund of 10% of total supply (10,000 \$HAREM
   5).
- Community Sale of 5% of total supply (5,000 \$HAREM).
- Public sale of 50% of total supply (50,000 \$HAREM).
- No presale, no premine, no VC holders, no inflation.



<sup>&</sup>lt;sup>3</sup> Locked with 2.5% (375 \$HAREM) unlocking every month after the pre-sale tokens unlock.

<sup>&</sup>lt;sup>4</sup> Locked with 2.5% (1,000 \$HAREM) unlocking every month after the pre-sale tokens unlock.

<sup>&</sup>lt;sup>5</sup> Locked with 2.5% (500 \$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 locked until the last day of the Public Sale, at which point they will unlock and vest 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 Public 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 not be distributed to buyers until the end of the General Sale, which will last 14 days. At the end of the 14 days, 25% of the proceeds from the General Sale and a corresponding amount of \$HAREM<sup>6</sup> will be added to the Uniswap LP. Any remaining General Sale tokens will be burned by being sent to a dead ETH address, an equal proportion of the FEA, Dev Treasury, and Community Development tokens will also be burned in this fashion. It is only after this that the FEA, Dev Treasury, and Community Development 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 locked through Lock Protocol, with beneficiaries pre-specified.
- 2. 1 month of waiting.
- 3. Harem team begins Public Sale. Tokens sold in the Public Sale are held by the Harem team until the last day of the Public Sale.
- 4. Day 13 of the Public Sale, the Harem team uses 25% of the ETH from the Public Sale and the appropriate amount of \$HAREM per footnote 6 to form the Uniswap LP from which staking rewards can be derived. Remaining Public Sale tokens and FE&A/Dev Treasury/Community Development tokens are burned.
- 5. The remainder of the FE&A/Dev Treasury/Community Development tokens are locked and begin their unlocking schedule.
- 6. Day 14, Public Sale ends and tokens are sent to buyers.
- 7. Pre-sale tokens start vesting at 25% per week.

# **Community Development Fund:**

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

<sup>&</sup>lt;sup>6</sup> Such that the ratio in the LP is 0.035 ETH per HAREM.

<sup>&</sup>lt;sup>7</sup> So for example if 25% of the public sale tokens are left after supplying the Uniswap LP, 25% of FE&A, Dev Treasury, and Community Development tokens will be burnt.

- 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.

# **Lock-Up Reward NFTs:**

For more information on Lock-Up Rewards for \$HAREM owners, please reference the linked document on our DYOR page.