

# DeepFakeAI and \$FakeAI: The Nexus of DeepFake Technology and Cryptocurrency

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## Abstract

Deepfake technology has gained international attention in recent years as AI tools have become both more powerful and more accessible, threatening to forever change the world of digital media in the same way that the advent of cryptocurrencies forever changed the world of finance and investment. While cryptocurrency is now available to individuals with very low barrier to entry, the inherent computational burden of creating a deepfake keeps it out of the hands of those who don't have powerful computers or server farms. The solution to cryptocurrency's access issues was to create the wide network of main currencies we see today (Bitcoin, Ethereum, etc) and make accessible the advantages of a decentralized form of currency (through services such as Coinbase, Metamask, etc). The solution to deepfakes becoming more accessible is a service capable of leveraging the power of the blockchain to simultaneously allow fast, cloud-based access to deepfake technology and create a sustainable cryptocurrency behind it that will support the project, attract investors and turn a profit. *DeepFakeAI* is that service. This initial version of this whitepaper will serve to illustrate the purpose of *DeepFakeAI*, present the investment opportunity of **\$FakeAI**, and to give an overview of how the service works alongside the currency.

## 1 Introduction

*DeepFakeAI* is a program designed to allow users to create deepfakes with just a few clicks, utilizing the corollary token **\$FakeAI** to turn a useful and entertaining tool into the backbone of a token built to increase in value. The deepfake service is available through a web app as well as through Telegram, and through the *DeepFakeAI* bot, "Premium" users can add deepfake capabilities to any Telegram group. Furthermore, there is a "Web API" available, through which *DeepFakeAI* can be added to a website for it's users to enjoy. All payments to use *DeepFakeAI* are done through **\$FakeAI**, funneling traffic to the currency by design. Due to a carefully created smart contract, each *DeepFakeAI* payment through **\$FakeAI** burns tokens, naturally increasing the value of the token as the service is used and it's reach grows. There is also a tax on buys and sells of the currency itself that allows the currency to grow beyond a simple payment mechanism for *DeepFakeAI* and become a market force of it's own while still providing longevity to the *DeepFakeAI* service. Through this approach, *DeepFakeAI* has the potential to become an extremely lucrative investment, and a new force in the industries of deepfakes and cryptocurrencies alike.

## 2 DeepFakeAI

*DeepFakeAI* is the deepfake service at the center of the project. It uses a deep learning training algorithm to analyze a specific voice that is fed into the service by the development team. Through training and tweaking, the voice is improved over time and curated into a character that can be used on the site. This character can then be fed lines to create audio of the character in question saying whatever input has been given. This audio can then be paired with a video using a lipsyncing process to create an AI generated video of a selected character saying whatever the user wishes.

### 2.1 How It Works

When creating a new Character, the development team at *DeepFakeAI* procures openly available audio that contains only the voice of the chosen speaker. This includes an in-depth process of removing other

voices, background noise and any random interruptions to isolate only the voice in question. This voice is then fed through the deepfake algorithm through a multistep process, throughout which progress is monitored and the process is tweaked to achieve the best voice possible given the available training data. This voice is saved as an available Character, and is paired with a lipsyncing process that syncs the words being said to a basic shot of the chosen Character saying the chosen words. This Character is then available to use with all *DeepFakeAI* services as the user pleases. The process roughly follows the figure below.

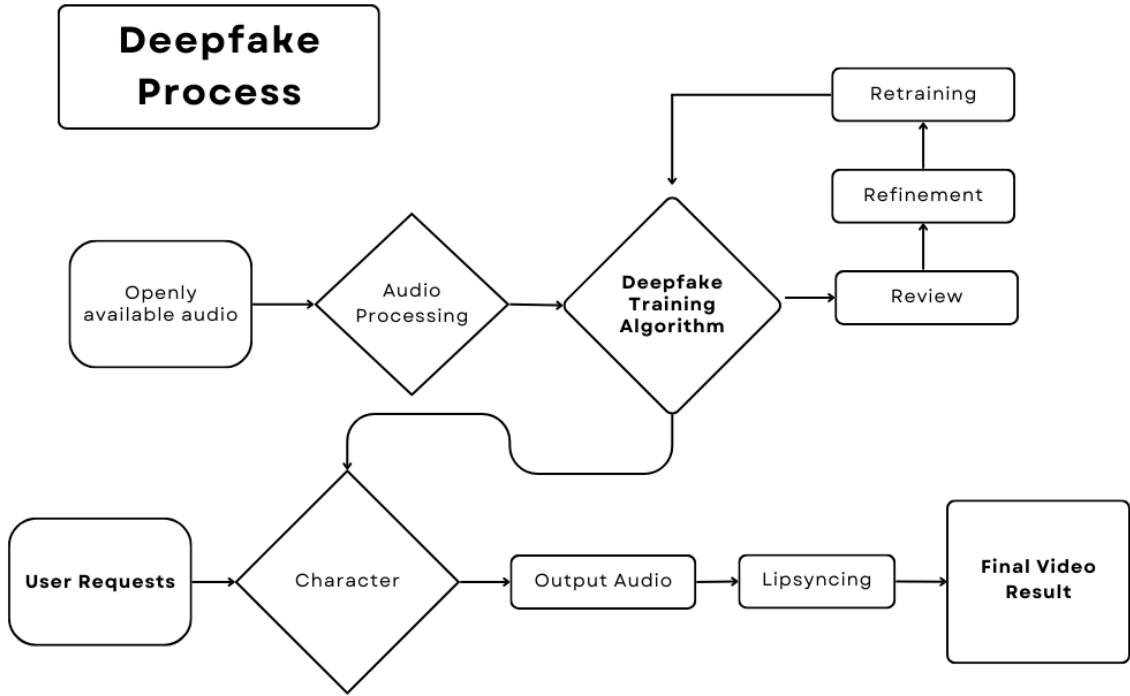


Figure 1: The Character creation and deepfaking process

### 2.2 Using the Service

*DeepFakeAI* can be used in a number of ways. The most basic is to access it via the dapp page. Through the dapp page, the user can choose a character, give some input text, and receive the final result all through the web portal. Minutes are purchased prior to accessing the services as explained in Section 2.3.

Another way to use the service is to add the *DeepFakeAI* bot to a telegram server for all users to access. This allows users in a given group to use *DeepFakeAI* as they please as a fun way to entertain each other, either for free or for the owner of the group to monetize in some fashion.

Also available is the Web API, which can be embedded into a website of the users choosing. The service can then be available for use or monetized in some way to generate a profit.

### 2.3 Payment Structure

When it comes to payment, there are two main options through the dapp: the **Basic** option and the **Premium** option.

The **Basic** option allows users to buy minutes and use the Web App or Telegram to access the service. A wallet is linked to the site to buy minutes, which can currently be bought with Ethereum but in the future will be able to take other forms of payment including fiat currency. Minutes are exchanged for clips of video, which can be done either through the Web App directly on the dapp page, or a Telegram username can be linked to the site and the service can be accessed through Telegram.

The **Premium** option allows users to add the Telegram bot to a Telegram group, where other users are free to use the service so long as the Premium user has minutes in their account. Additionally, the Web API is available, which allows Premium users to add *DeepFakeAI* to their website. This is set up in the same structure as the Telegram bot, but is instead embedded into the user's website.

All users using the above payment process to buy minutes have their payments processed through the **\$FakeAI** smart contract, as seen in the figure below.

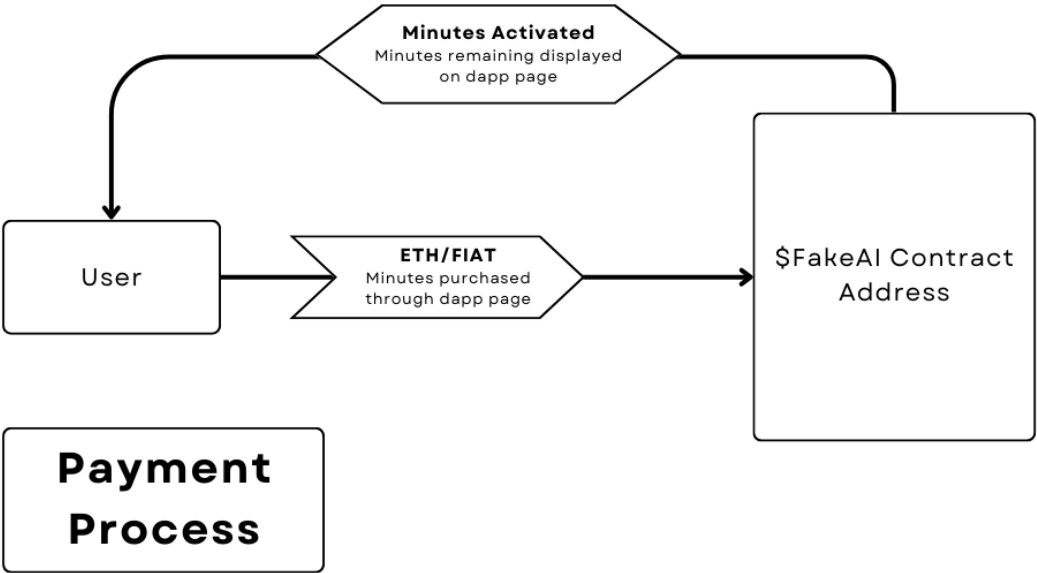


Figure 2: The payment process for buying minutes

There is a third option, which allows users to purchase **\$FakeAI** directly. By holding 1,000,000 tokens, the user is free to use *DeepFakeAI* as much as they would like for personal use. This does **not** include the extra services described in the Premium option, but the services described in the Basic option are free to use for personal use cases.

### 3 \$FakeAI

\$FakeAI is the token backing the *DeepFakeAI* service. It is hosted on the Ethereum Network at the address 0x5AEf5bba19e6a1644805Bd4F5C93C8557b87c62c. It uses an ERC-20 smart contract to regulate transactions and can be traded for ETH on Uniswap, among other services. The smart contract’s payment model is designed to keep gas fees as cheap as possible while maintaining the payment structure outlined below.

#### 3.1 Payment Processing for *DeepFakeAI*

Payments to buy minutes of the *DeepFakeAI* service go through the following structure:

- The user first buys minutes with another currency, currently done through ETH, and planned to offer a fiat currency option in the future
- The funds used to buy the minutes are sent to the **\$FakeAI** contract address
- The funds are then split amongst development and the **\$FakeAI** burn address
- The minutes are activated for the user and they are able to use the **\$FakeAI** service as they please

The development cost is also split into two different sections, where 20% goes to labor costs, including the development team themselves. This ensures that they can continue to work on the service as time goes on. The other 30% goes directly into development and maintenance costs related to keeping the service up and running. A more detailed figure is displayed below.

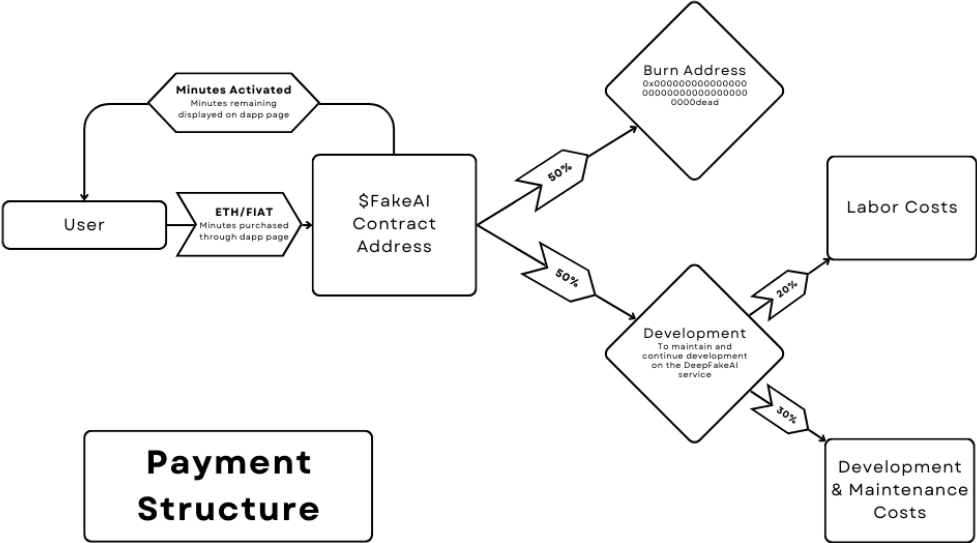


Figure 3: The payment structure for using *DeepFakeAI*

This structure allows the *DeepFakeAI* service to continue running while automatically burning **\$FakeAI** to naturally encourage deflation.

## 3.2 Individual Trading

\$FakeAI can also be traded just as any other currency would on the Ethereum network. It is currently listed on Uniswap, and detailed information can be viewed on Etherscan, Coingecko, and DexTools among others. The currency has a 4% buy and sell tax, with 3% going to the DeepFakeAI team and 1% going straight to the liquidity pool and LP tokens get burnt. This allows continued use of the currency to fuel the longevity of the DeepFakeAI service, while still burning more LP tokens to increase the token value.

## 4 Investment Potential

By buying **\$FakeAI**, investors can have a stake in the long term value of the service. As the service grows more popular and widespread, more and more tokens will be burned, resulting in a natural increase in the value of the currency. As more characters are added, the potential value of the service becomes greater and the use cases more widespread. The team at *DeepFakeAI* plans to continue expanding the reach of the service, and the ease of use through the processes detailed above means that any consumer can use the service without barrier to entry.

### 4.1 Roadmap

The current roadmap for *DeepFakeAI* is one mainly focused on expanding the reach of the project. While at the time of writing the outreach is limited, future developments in both market strategy and technology will allow growth with no hard limit on how far it can reach. **Future Developments**

- Improved Deepfake Quality
- Introducing fiat currency as a payment option alongside ETH
- Platform optimization for ease of use and efficiency
- Introducing *DeepFakeAI* bot to new platforms
- Greatly expanding the Character pool
- Long term marketing strategies on multiple platforms
- Direct advertisement on social media as well as purchased ads

## 5 Conclusion

Deepfakes and Cryptocurrency. Two rapidly expanding industries that have finally met in one place. *DeepFakeAI* and **\$FakeAI** are the backbone of a new project with the potential for a meteoric rise. Longevity is the name of the game, and the ability of the two aspects of this project to support each other's growth opens the gate to limitless possibilities. The service is up, and the currency is being traded right now. It's up to every individual as to whether they want to get in on the ground floor, or watch as the rocket leaves without them.