

1. Executive Summary

The power of AI (data, IP, infrastructure, talent) is largely centralized in the hands of a few big companies. At the same time, data scientists have few options to support themselves through online platforms. We propose to build a decentralized AI marketplace, to solve problems such as monetization (and censorship) associated with popular centralized platforms like HuggingFace (HF). This can kickstart an AI creator economy. Our team has experience working on the technologies needed to build this (e.g. core tech earmarks for OceanDAO on integration with (i) decentralized storage solutions, (ii) data science platforms, and an ongoing Filecoin devgrant).

2. Problem / Opportunity

The growth of HuggingFace has been staggering. The platform recently [passed](#) 100,000 users and 50,000 open source ML models and [raised](#) a \$100M Series C. However, user contributions are not compensated, and there is no way for users to maintain ownership or monetize their creations. In fact, while there are many large online communities of data scientists (e.g. HuggingFace, Kaggle, Eleuther.ai), there are few avenues that allow individuals to go full time on their own projects (compared to Web3). Furthermore, there has been much discussion recently around the possibility of the HF platform to [remove or gate models deemed harmful](#). This brings up interesting questions around who decides what gets removed, and it's easy to imagine a future where models are censored. A decentralized AI marketplace has the potential to solve a number of problems faced by data scientists.

3. Solution

AI Marketplace We plan to create an AI marketplace built specifically to the needs of data scientists. This includes forking and modifying the Ocean marketplace frontend, which would sit on top of our own forks of Ocean Provider, compute engine etc. This would initially use centralized cloud compute (AWS), which we have experience in setting up (eventually, we plan to modify the backend to run on decentralized compute, using the bacalhau project by Protocol Labs who we have close connections with).

Decentralized Storage The AI marketplace will be fully integrated with decentralized storage (IPFS, Filecoin). This is made possible by our previous work on core tech earmarks for Ocean, as well as an ongoing [grant](#) from Filecoin. These two technologies are highly complementary: Ocean provides enhanced discoverability and provenance of datasets on IPFS, while Filecoin improves permanence of data on Ocean.

Embedded Apps Part of the reason for the popularity of HF is the ability to demo [apps](#) using app frameworks such as Gradio and Streamlit. We plan to fork the Ocean marketplace and add a page with embedded apps. We have previously worked on implementing token-gated apps using ocean.py on the HF platform ([blog](#) tutorial, [video](#), Algovera [organization](#) on HF). More recently, we have been exploring the feasibility of integrating the Streamlit app framework with MetaMask to provide better security and UX (no need to input a private key).

Data Science DAO We are building a DAO for data scientists. We will continue to onboard 5 independent AI teams each month through microgrants (each \$1000) and encourage them to

publish assets that they create on our marketplace. To date, Algovera has funded 12 independent AI teams (with Round 3 coming soon). For examples of our teams, check out [DeepDeFi](#), [Smart NFT Search](#) and [DAOkit](#). We continue to evolve our governance (e.g. voting through [reputation NFTs](#)). Eventually, the DAO will govern the AI marketplace such that access to models is in the hands of a larger group of users and creators, rather than a centralized group. We also run [hackathons](#), [study groups](#), reading groups, [discussions](#), [hacking sessions](#), [hackathons](#) and [IRL events](#).

4. Project Value for Ocean

This project has the potential to onboard more data scientists to the Ocean ecosystem (there remain relatively few). Increasing data consume volume is an important goal for Ocean and data scientists are natural consumers of data. The development of apps will also make it easier for users to consume data and algorithms. More advantages of integrating features of HF and attracting HF users can be found in the table of this blog [post](#).

5. Ocean Value for Project

Ocean Protocol is a core component of our stack that provides us with the ability to monetize. We can add transaction fees to our marketplace, and receive rewards through data farming. We can also charge for access to our storage and compute providers through our own marketplace app and others (as supported by Ocean V4).

6. Objective and Key Results (KPIs)

Our main objective is growth. KPIs that are of importance for us are number of users, number of assets on the marketplace, and number of assets consumed.

7. Timeline & Milestones

The project will be ongoing for 6 months (with a requested budget of \$35k per month).

Milestone 1 - Complete and launch our own Provider, provide (and charge for) access to storage and compute with Ocean community (including existing clients)

Milestone 2 - Relaunch existing assets on Polygon and undertake data farming

Milestone 3 - Fork Aquarius, remove broken assets, migrate open source assets from HF

Milestone 4 - Build and launch new app frontend with improved UI/UX

Milestone 5 - Launch embedded apps feature

8. Level of Support needed (Ocean related work only)

We are very familiar with Ocean software overall and require little support.

9. Team

Richard Blythman - Machine Learning Engineer, Web3 Developer (Python)

Hithesh Shaji - Full Stack Developer, Blockchain Developer (Consensys Bootcamp)

Keaton Kirkpatrick - Full Stack Developer, Blockchain Developer (Consensys Bootcamp)

Jakub Smékal - Full Stack Developer, Web3 Developer (Python)

Mohamed Arshath - Business Developer, Data Scientist, Web3 Developer (Python)