Project name: Opt x PathoMap

Author name and contact info:

Author: @Raconcilio (Rose Haft) on behalf of PathoMap

I understand that I will be required to provide additional KYC information to the Optimism Foundation to receive this grant:

Yes

L2 recipient address:

0x78CAa461da41bb64e08Fd7191657DF48E5804b2A

Which Voting Cycle are you applying for?

Cycle 7

Grant category:

NFT / Developer / Token / Optimism

Is this proposal applicable to a specific committee?

Yes. Global Public Good

Project description:

PathoMap is a proprietary healthcare AI that has been able to help where even doctors cannot.

America's healthcare system is broken. It is expensive, sometimes insurance costs taking up 25% of net income. Misdiagnosis is one of the top five causes of death and healthcare expense and WHO estimates that 80% of the top 5 causes of death are reversible and preventable. If we were able to start decreasing costs for even 25% of these cases, we could significantly increase quality of life and reduce overall healthcare costs to start getting prices back to manageable.

There are main reasons why this has not happened yet:

- There is no tracking to see what works

- The methods of tracking assume everyone has the same starting body chemistry and DNA and so to track and recommend properly the right methods need to be used

- The methods of analyzing are complex and not a one-size-fits all solution

The project will enable us to:

- Have blockchain ledgers so we know the data is trusted

- Reporting dashboards on what factors matter for the health outcomes

- Have NFTs that help to govern how that data can be used

The impact will be:

- Lower healthcare costs

- New DSM type recommendations that look at the root cause of health issues, not only symptoms

- Optimized health for everyone

- Decentralized work structure

- Better scientific compliance

The areas of health we are tracking and able to help with so far:

- Diabetes, heart disease & weight loss

- ADHD, focus and concentration, schizophrenia and other mental health disorders

- Broken bones

- Pain

- Aging

- Hair

- Fertility

- Other

Current Status:

PathoMap currently has a HIPPA compliant system but does not have a blockchain set-up. This AI takes about two hours to process but can only do one at a time and we are working to automate these processes to be able to do multiple in parallel while also working on developing the systems for third parties to report on.

Project links:

- Intake form: [members.pathomap.co/intake]

- New UI for easier daily tracking (not yet publicly released as we are filing patents)

- New UI for worksite wellness programs

Please link to any previous projects the contributors has meaningfully contributed to:

- SAE supermileage competition (1st in USA)

- Runner up in a 3 day AI competition to build sudokus

- Developed system for incorporating cancer prevention & detection systems into AR & VR

Relevant usage metrics:

Need more context

Competitors, peers, or similar projects

:**

While there are blockchain medical records companies, there is not one that has developed an AI to go with it that's been useful.

Is this project open sourced?

Yes and no. The AI methods, and identifiable patient data will not be directly open sourced so everything is visible however the data that is added to the system will be open sourced and we will allow those contributions to be licensed and residual income can be made from these contributions.

Optimism native?:

We plan to use Optimism, yes.

Date of deployment/expected deployment on Optimism:

March 2022

Ecosystem Value Proposition:

What is the problem statement this proposal hopes to solve for the Optimism ecosystem?

1. Reorganizing the digital world

2. To make profits from that reorganized digital world that is public goods (knowledge and research)

3. To move the world towards a system where, individual contribution, collectivism and collaboration are encouraged and equitably rewarded.

4. To create a highly impactful as well as highly profitable system

5. Create a decentralized ecosystem that can reliably provide for basic human needs (health!) and make it common place.

6. To be overwhelmingly Optimistic.

How does your proposal offer a value proposition solving the above problem?

We will bring value in three distinct ways – the first is to make medical, health and wellness, research a tokenized public good so that people can make profit from their work for years to come, and to also use the digital world to reinvent how we understand health, and to help prevent health failure as much as possible, or at least make it possible to do so, while also making profit. Finally, we will build the system so people can contribute in a decentralized way with the intention of best practices for public and private goods.

Our unique contribution is that we have an AI healthcare analysis system that works so we know what to build, track and recommend to make the project sustainable in the long-run.

Why will this solution be a source of growth for the Optimism ecosystem?

1. Healthcare is significantly underrepresented on the Optimism ecosystem with only one other known service, despite blockchain health being considered one of the biggest disruptions to help with some of the biggest problems in health including full control of patient data, supporting the validation of health protocols, transparent billing [1], with the added benefit that we will allow people to contribute data and scientific oversight in a decentralized way. It is not enough to own your data, and to have transparent pricing, we should also be working towards reducing overall costs with integrity, something only PathoMap is aimed to provide. We will further do this by integrating augmented reality solutions to help people make decisions in real time.

2. We will make OP the main source to validate information and know what to use, which will make this a centralized system for other groups.

3. We will find a way to either pay people for their data or use their data to lower overall insurance costs, thus making people financially incentivized to use the product, not only be nerdy about it.

Has your project previously applied for an OP grant?

No.

Number of OP tokens requested:

250,000

Proposal for token distribution:

How will the OP tokens be distributed? (please include % allocated to different initiatives such as user rewards/marketing/liquidity mining. Please also include a justification as to why each of these initiatives align with the problem statement this proposal is solving.)

Over what period of time will the tokens be distributed for each initiative? Shorter timelines are preferable to longer timelines. Shorter timelines (on the order of weeks) allow teams to quickly demonstrate achievement of milestones, better facilitating additional grants via subsequent proposals.

The project will work in two phases:

1. Have a framework for creating profiles and storing information.

2. Using real time data and information tested to demonstrate that our system works.

Developer Incentives:

We will distribute 50% (125,000) to admin work over 5 months to 4 people – a block chain specialist, a researcher, a data scraper, and an intern to help make sure the base material is sufficient. This will allow us to start to create buzz around people getting token kickbacks for their work with additional funds going towards a second or third person if necessary to speed up development.

We will distribute 15% (37500) to create a review program where in a decentralized fashion researchers can comment on the efficacy of different studies and to input the data, tests and methods that are used. We will meter the distribution on a weekly basis so however much work was done for that week, it will be split proportionately to incentivize the balance of quality of work and efficiency and team work.

We will distribute 10% (25000) to anyone wanting to contribute to API integration for different testing methods.

We will distribute 10% (25000) + commission to sales and marketing team.

User Incentives:

We will distribute 20% (50000) to a group of 30 people to have them do baseline testing and to participate in a study of using the platform on a daily basis.

Distribution will be greater each week as the data becomes more impactful

"The core principle behind the concept for retroactive public goods funding is simple: it's easier to agree on what was

useful than what will be

useful" - Vitalik Buterin

We will use the RAPID method to hire developers as described by the DopeWars Team

To onboard science team, we will take them through a training that helps them to understand the facets of scientific efficacy we will look at such as conflict of interest, citation frequency, double blind studies, case studies, etc. The scientists will be instructed to use the scientific method for each of the articles and to work with people outside of their expertise to try to bridge knowledge gaps (one of the other major problems with the healthcare industry).

Milestones

Please list the milestones/KPIs you expect to achieve for each initiative, considering how each relates to incentivizing sustainable usage and liquidity on Optimism. Please keep in mind that progress towards these milestones/KPIs should be trackable.

1. Blockchain profiles

2. Platform to categorize and review scientific articles

3. Token incentives for new citations, review, drug or protocol development

4. Linking our UI for daily data collection for secure and compliant health records

5. Creating a dashboard to show data changes, and what solutions have been helpful.

We will update a wiki with weekly progress.

References

[1]

StartUs Insights – 15 Jan 19

8 Blockchain Startups Disrupting The Healthcare Industry

Based on an analysis of 300+ startups, we'll show you 8 Blockchain startups disrupting the healthcare industry and their most innovative use cases!

Est. reading time: 6 minutes