Grant Application - Leakage Analysis

Grant Title:

Script for analyzing transaction leaking from MEVblocker to the public mempool

Author:

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About You:

I am a data engineer and data analyst with a solid background in building data pipelines.

Grant Category:

MEV Research

Grant Description:

Write a script that estimates the damage for leaked transactions from MEV Blocker builders:

- Given a list of transaction that we think have been leaked
- Compute the delta in token balance changes of the actual transaction and a simulation had the tx been included at the top of the block
- Convert asset changes in ETH

Grant Goals and Impact:

The script can then be used for further analysis of past or future incidents.

It can also be integrated into an automated pipeline to continuously assess the trustworthiness of builders. This is achieved by calculating distributions for each builder, determining the extent of 'top of block slippage' incurred by the transactions they include.

Milestones:

This project has one deliverable: write a script that can calculate the slippage of a given transaction compared to its simulated inclusion at the top of the same block.

Funding Request:

1.4k xDAI

Gnosis Chain Address (to receive the grant):

0xb64da7096c50948721154036eC63665E9Db1C7c7

Referral:

The grant idea was discussed with Felix Leupold.

Terms and Conditions:

Include the following line in your grant application:

By submitting this grant application, I acknowledge and agree to be bound by theCoW DAO Participation Agreement and the CoW Grant Terms and Conditions.

In addition to the CoW DAO Participation Agreement and the CoW Grant Terms and Conditions, applicants must adhere to the Completion Timeline Clause.