SECTION 1: APPLICANT INFORMATION

Applicant Name

: Keybox.AI Smart Contract Security Analytics

Project Name

: Keybox.AI Smart Contract Monitor and Alert

Project Description:

Keybox.AI is a cutting-edge Smart Contract Monitor designed for the Web3 ecosystem, providing users with advanced monitoring and analytical tools to ensure the security and efficiency of their smart contracts. It offers a unique combination of real-time surveillance and intelligent insights, enhancing the reliability and performance of blockchain applications.

Team Members and Qualifications:

- @invitedtea. Smart Contract Data Scientist
- @MJ

. Data Analyst

Project Links:

- Website: www.keybox.ai
- Twitter: @keybox.ai

Contact Information:

- TG: invitedtea
- Email: vicky@Keybox.ai

SECTION 2: GRANT INFORMATION

Requested Grant Size:

30k $ARB

Grant Matching:

N/A

Grant Breakdown:

Grant Breakdown

Subject

Details

Grant Allocation

Status

On-chain Data Dashboard

Smart Contract Monitor seamlessly integrates with both GMXv1 & v2, offering users an intuitive and efficient way to monitor smart contracts. By simply inputting a contract address or navigating through the http://keybox.ai/ homepage, users gain access to a wealth of information and analytics. This includes detailed smart contract performance metrics such as execution success rates, gas usage, and interaction patterns. Additionally, our platform provides insights into the security status of contracts, highlighting any potential vulnerabilities or anomalies detected. Users can effortlessly track and analyze the health and efficiency of their smart contracts, all in real-time, ensuring optimal performance and security."

10k $ARB

Processing

Machine Learning Model

Incorporates advanced Machine Learning (ML) models to offer predictive insights and anomaly detection in smart contract behavior. These models are trained on vast datasets, enabling them to identify unusual patterns, potential vulnerabilities, and optimization opportunities in smart contracts. By leveraging ML algorithms, it can provide users with predictive analytics, risk assessments, and recommendations for improving smart contract efficiency and security. This feature is particularly useful for developers and auditors looking to preemptively address issues before they impact the blockchain network or end-users.

10K $ARB

on the roadmap

Regular Updates and TG Bot Alert

A standout feature is the implementation of a real-time alert system via Telegram. This feature ensures that users are instantly notified about crucial contract events, potential security risks, or unusual activity patterns directly through Telegram messages. Whether it's for routine monitoring or urgent alerts, http://keybox.ai/ combines thorough smart contract analysis with the convenience and immediacy of Telegram notifications, enhancing both the security and efficiency of the blockchain operations.

10k $ARB

on the roadmap

Funding Address:

0x2C540b83EAc05C87A456E59D537beeC8C7E44D70

SECTION 3: GRANT OBJECTIVES AND EXECUTION

Objectives:

The main objectives of Keybox.AI's grant application are to bolster user interaction within the GMX ecosystem, deliver a comprehensive set of monitoring tools for smart contract management, and foster the growth and fortification of the GMX network.

Key Performance Indicators (KPIs):

- Smart Contract Monitoring Usage:

Achieve monitoring of 100% smart contracts coverage through Keybox.AI on two chains, reflecting the widespread adoption and reliance on our platform within the GMX ecosystem.

- Incident Detection and Alert Efficiency:

Successfully identify and alert 95% of critical incidents related to smart contract vulnerabilities or anomalies, underscoring the effectiveness of our monitoring tools.

- Monthly Active Users (MAU):

Reach 1000 monthly active users, demonstrating the platform's popularity and consistent engagement within the GMX community.

- Contribution to GMX Security:

Contribute to reducing smart contract vulnerability in the GMX ecosystem by 50%, showcasing Keybox.AI's impact on enhancing overall network security.

- Educational Outreach:

Conduct monthly GMX smart contract health report per month on smart contract security, emphasizing Keybox.AI's commitment to fostering a knowledgeable and secure GMX community.

How will receiving a grant enable you to foster growth or innovation within the GMX ecosystem?:

The grant will enable us to allocate additional resources towards the development and refinement of Keybox.AI's features. This includes expanding data availability, our monitoring capabilities, enhancing machine learning algorithms for anomaly detection, and improving real-time alert systems. With these enhancements, Keybox.AI will be better equipped to address the evolving needs of smart contract security in the GMX ecosystem.

Execution Strategy:

Prioritize immediate improvements in the existing monitoring and alert system, focusing on enhancing accuracy and speed.

Begin integration processes for GMX V1 & V2.

Improve the user interface for ease of use and accessibility. Implement user feedback mechanisms to gather early insights.

Grant Timeline:

We propose the following timeline for the grant, with a request for an initial batch of funds to cover completed subjects:

First $10,000 ARB to be released on the acceptance & approval of the Grant.

January 2024: Dashboard Completion

- Early January:

Finalize development of the on-chain data dashboard.

- Mid January:

Conduct internal testing and debugging of the dashboard.

- Late January:

Deploy the dashboard for user access.

February 2024: Feedback Collection and ML Model Development

- Early February:

Begin collecting user feedback on the dashboard functionality and usability. Second $10,000 ARB to be released

- Mid February:

Analyze feedback to identify areas for improvement.

- Throughout February:

Parallelly, initiate the development of the Machine Learning (ML) model for enhanced anomaly detection and predictive analytics.

- Late February:

Implement initial improvements to the dashboard based on early feedback. Request release of 10k $ARB.

March 2024: Launch of Telegram Bot for Alerts

- Early March:

Finalize the development and testing of the Telegram bot for real-time alerts.

- Mid March:

Integrate the Telegram bot with Keybox.AI's monitoring system. Request release of the last 10k $ARB.

- Late March:

Officially launch the Telegram alert system for users, providing real-time notifications on smart contract activities and security issues.

Ongoing Post-Launch Activities (April 2024 Onwards)

- Continuous Feedback Collection:

Regularly collect and analyze user feedback for ongoing improvements.

- ML Model Refinement:

Based on real-world data, continuously refine the ML model for accuracy and efficiency.

- User Education and Support:

Provide ongoing support and educational resources to users, ensuring effective use of allKeybox.AI features.

- Monitoring and Updates:

Keep monitoring for any issues and release updates as needed to enhance functionality and user experience.

Detail Security and Risk we are monitoring:

Critical Impact Areas:

Implement features to detect and alert any unauthorized transactions that may lead to the direct theft or manipulation of user funds, insolvency, or theft of governance funds.

Monitor for signs of permanent or temporary freezing of funds, which could indicate critical vulnerabilities.

High Impact Areas:

Detect abnormalities that could lead to the theft or freezing of unclaimed yield.

Alert on permanent freezing scenarios specific to unclaimed yield

Medium Impact Areas:

Provide monitoring capabilities for operational issues like block stuffing, griefing, and unbounded gas consumption.

Alert on temporary freezing of funds and any operational anomalies that could affect the smart contract’s performance.