Office of Innovation and Industrial Relations (OIIR)

LICENSING & PARTNERING OPPORTUNITY



# Kansa: Transforming Blockchain Security with AI-Powered Insights

#### SMART CONTRACT SECURITY WITH SCALABLE AUTOMATION

Smart contracts and DeFi are relatively new inventions that have a great potential to revolutionize today's traditional finance (TradFi) in terms of innovations in both systems and operations.

Moreover, there are very few companies with enough expertise to explore and tackle smart contract security issues, and almost all of them rely on manual audits. As such, Kansa is positioned to be one of the pioneering solutions that can disrupt the status qua by performing smart contract security analysis at scale, finishing audits in minutes for a few hundred dollars instead of weeks for many thousand dollars.



#### **ABOUT THE TECHNOLOGY**

Kansa is an innovative HBKU Technology that automates smart contract security analyzers.

It utilizes several open-source smart contract static analyzers to scan Ethereum smart contracts at scale. It also implements a rule-based expert system to aggregate scan results from analyzers into one explainable security score.

The web app allows user to search for specific contracts, see their aggregated security reports, and trace and visualize relevant transactions.

The API serves the web app in addition to providing a standalone, on-demand smart contract security analysis as a SaaS product. It allows users to send their smart contract's bytecode or source code and receive detailed security analysis along with many useful metrics in order of minute.

## APPLICATIONS

- > Security Analysis
- $(\mathbf{b})$  E-crime investigations
- $(\mathbf{\hat{b}})$  Investment analysis



### **VALUE PROPOSITIONS**

While competing solutions run a single dedicated analyzer, the main innovation that underlies Kansa is a new analysis approach that combines multiple static/dynamic analyzers, each with its own advantages and disadvantages, and aggregates their results using a rule-based expert system that is both efficient and cost effective.

This allows Kansa to provide accurate smart contract security auditing as an automated cloud service, which can be easily integrated with development frameworks, deployment pipelines, or other products using a standard API over HTTPS.

In a sense, Kansa reduces the solution from slow and expensive manual audits to a single, metered API call with a callback for results in minutes.

DATENT STATUS

Patent application has been published.

Hamad Bin Khalifa University is offering this technology for license. For more information, please contact: innovation@hbku.edu.qa