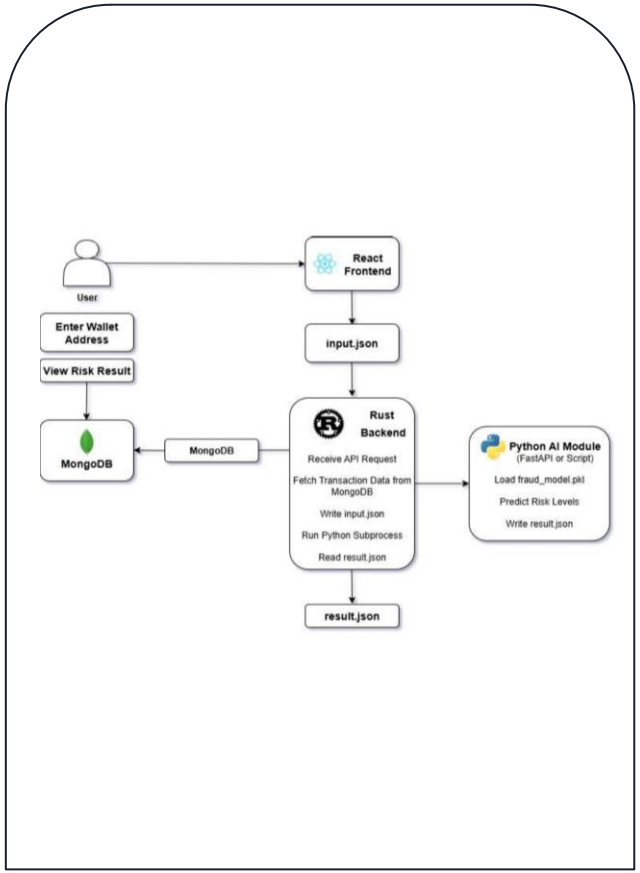
Block sheild

Built a real-time fraud detection system that fetches ICP blockchain transactions, stores them in MongoDB, and uses AI/ML models to flag suspicious activity.

The Problem of our Project –

- A system to detect fraudulent or suspicious blockchain transactions in real time
- Uses ICP (Internet Computer Protocol) blockchain data
- Combines AI/ML models with live data tracking
- Aim: Prevent scams, phishing, and illegal transfers



Crypto Fraud Losses Over Time

- **$14B+** lost to crypto scams and frauds in recent years
- No **real-time fraud detection** available for the **ICP blockchain**
- Users are exposed to:
  Phishing attacks
  Fake transactions
  Unauthorized fund movements
  Current detection methods are:
  Manual
  Slow

Web3 Trust Breakdown (User-Centric Problem)

- 75% of Web3 users feel **unsafe** using DeFi platforms
- Most rely on gut instinct — **no fraud signals or alerts**
- Existing tools: Don’t support ICP ,Lack real-time detection ,Don’t integrate AI

Existing players solving it...but poorly

Chainalysis	CipherTrace	Nansen	BlockSec
✗ Expensive, enterprise-only	✓ Hard to Integrate with Custom Apps	✓ Users have to interpret data manually, no automation or warnings.	✓ Focuses on Smart Contract Bugs, Not Wallet Transactions
✓ Built for forensic analysis, not **real-time fraud flagging**	✗ No Real-Time Inference	✓ Purely data dashboards, no predictive intelligence.	✓ **Lacks End-User Tools or API Access .**
✓ Doesn't utilize modern ML models to score risk dynamically.	✓ No Modern AI Implementation	✗ Visualizes on-chain activity, but doesn't flag fraud.	✗ No Support for ICP Blockchain

Existing players solving it...but poorly

PeckShield

- Primarily focused on **smart contract vulnerabilities**, not wallet behavior .
- No **real-time monitoring** of transaction patterns
- Lacks **user-level risk prediction** or AI-driven detection

SlowMist

- Heavy on **manual analysis and reporting**, not automation
- Doesn't provide **automated fraud scoring or alerts .**
- No AI/ML fraud engine to process live data streams .

Here’s how our approach stands out...

- AI-Powered Fraud Detection
- **Built with Rust for Performance**
- **Python ML Integration Made Simple**
- **ICP Blockchain + Live Monitoring**
- **Developer-First Design**
- **Secure & Transparent**

Making it happen (Use-cases)

Current

Wallet Risk Scanning (Live) :Users can enter a wallet address to instantly check the fraud risk of its recent ICP transactions.

Real-Time Transaction Analysis :
Backend fetches and processes blockchain transactions through AI, returning categorized risk levels.

Near Future

Fraud Alert System for Wallet Owners :
Subscribe to alerts whenever risky or unusual activity is detected in a watched wallet.

API Access for Developers & dApps :
Offer plug-and-play fraud detection as an API service for integration with wallets and exchanges.

Distant Future

Self-Learning Fraud Detection Engine :
Continuously improves via reinforcement learning on user feedback and flagged activity.

Multi-Chain Support + Smart Contract Layer
Extend detection beyond ICP to Ethereum, Solana, etc., and launch smart contracts to auto-freeze high-risk assets.

Why Now?

The timing is perfect > because the risks are growing, and the solutions haven't kept up.

- **Surge in On-Chain Fraud**
- **ICP Blockchain is Growing, But**
- **Unprotected Mainstream 🤖 AI +**
- **Rust = Finally Feasible for Real-Time Detection**

Why are we the ones to do it?

- **New project**, but backed by strong practical experience in AI, blockchain, and system design
- Team of developers with hands-on skills in **Rust, FastAPI, MongoDB, and ICP integration**
- Built a **working prototype** with real-time fraud detection pipeline in just weeks
- Passionate about solving real-world problems with **technical precision and speed**

Trisha Mandal
AI -Module

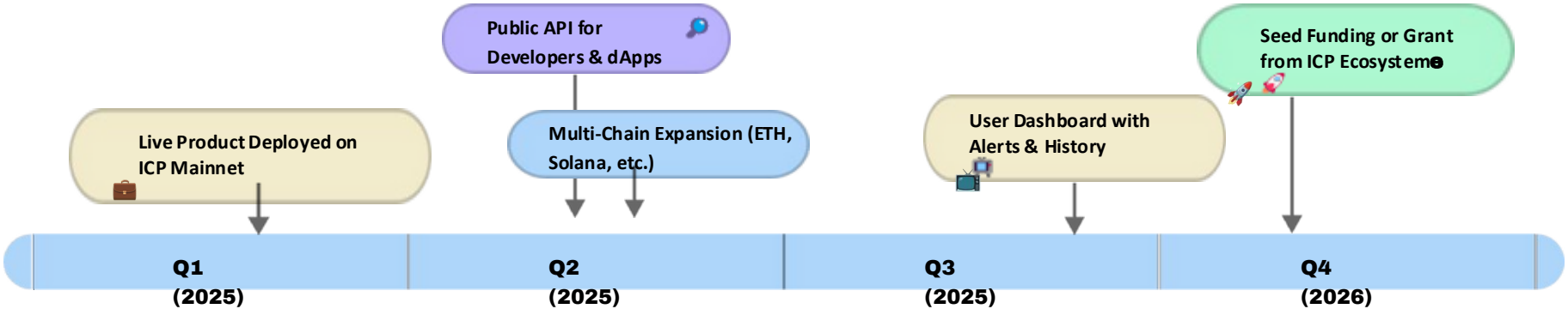
Alok Ranjan
Backend

Anurag Shrivastav
LEAD

Mahaswi Bejugam
API

Mohammadsaad Peerjade
Frontend

Where will we be next year if we win the hackathon/raise funds?



Here is how we make/will make money...

+10%
income increase/quarter

+25%
income increase/quarter

+40%
income increase/quarter

- **Transaction Risk Scanning Fees**
  Charge a **micro-fee** per wallet scan or transaction risk analysis via our API or frontend dashboard.
  Premium User Subscriptions
  Offer advanced features (alerts, risk history, monitoring multiple wallets) via a **monthly or yearly Pro plan**.
- **Fraud Detection-as-a-Service (FDaaS)**
  License our backend API to **wallets, DeFi protocols, and crypto exchanges** for integrated fraud risk scoring.
  Staking + Validator Pool Revenue
  Earn a share of **staking rewards** from managed pools and validator nodes with integrated fraud protection.

BLOCK SHIELD

BLOCKSHEILD.com

https://www.reddit.com/r/BlockSheild/

BLOCK SHEILD

We detect and prevent blockchain fraud in real time using AI-powered transaction analysis on the ICP network.

BLOCKSHEILD.com

ICP India

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