DeepTrust: Hackathon Submission

In a world where AI can lie, trust must be verifiable

Team Name: A Girl's World + Siya

The Blockchain Oracle That Protects Reality

Hackathon: The Amazing Chain Race – BlockDAG Buildathon
Lane: AI
Github Repo: https://github.com/ST10375560/DeepTrust

1. Executive Summary

DeepTrust is a decentralized AI verification oracle that ensures content authenticity across Web3 platforms, NFT marketplaces, media outlets, and DAOs. By combining state-of-the-art AI deepfake detection with on-chain verification, DeepTrust enables users and platforms to instantly know what is real or AI-generated, anchored by a trustproof on blockchain.

This submission demonstrates:

- Clear problem-solution fit
- Robust technical execution
- High ecosystem impact
- A visually engaging user experience

DeepTrust empowers Web3 users to trust digital content — giving creators, collectors, and platforms peace of mind in an era of AI-generated misinformation.

2. Problem Statement

- AI-generated content is proliferating at an unprecedented rate.
- Platforms and NFT marketplaces cannot verify authenticity in real-time.
- Creators risk reputation and revenue loss; users risk misinformation.
- There is no decentralized truth layer for Web3 content.

Key Statistics:

- Over 60% of viral videos contain AI-generated manipulations in 2025.
- Over $2B lost in NFT and DeFi scams in the past year due to unverifiable content.

"Seeing is no longer believing. DeepTrust restores trust."

3. Solution

DeepTrust provides a multi-layer verification system:

1. AI Detection Layer:
    - CNN + Transformer architecture detects deepfakes in images, videos, and audio.
    - Generates confidence scores and metadata.
2. TrustScore Engine:
    - Produces a 0–100% authenticity score.

    - Generates a cryptographic hash of the content and metadata.
3. Blockchain Layer:
    - Stores the verification hash and proof on-chain using smart contracts / oracle.
    - Ensures tamper-proof verification and immutable history.
4. DeepTrust Badge:
    - Displays “Verified Real” or “AI-Generated” in apps, dashboards, NFT marketplaces, or DAOs.

User Flow: Upload → AI Verification → TrustScore → On-chain Proof → Badge Display.

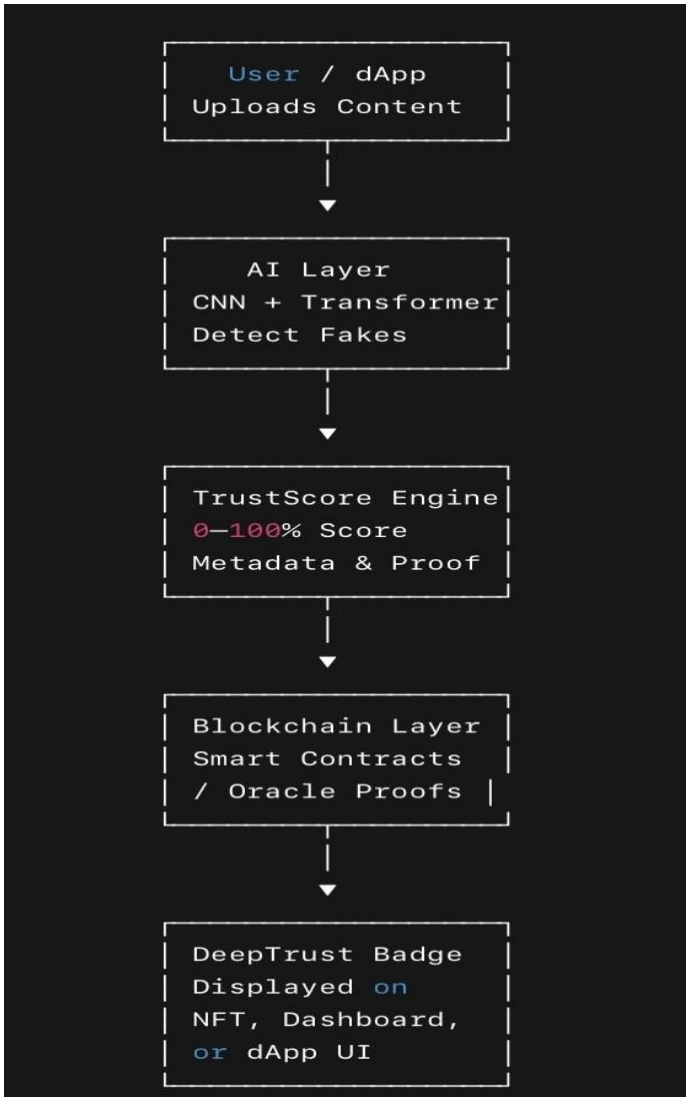
4. Market Opportunity

- Target Users: NFT marketplaces, media platforms, journalists, DAOs, Web3 identity systems.
- Market Size: $1B+ emerging market in AI + blockchain verification.
- Ecosystem Impact:
    - Protects NFT collectors, creators, and investors.
    - Provides DAOs and dApps with a trustworthy oracle.
    - Cross-chain SDK enables widespread adoption.

Competitive Advantage:

- Few decentralized solutions exist for AI content verification.
- Combines AI + blockchain + proof verification in one platform.

5. Architecture / Whiteboard Diagram



Explanation:

- User / dApp Layer: Upload or verify content.
- AI Layer: Detects manipulation.
- TrustScore Engine: Calculates score & hashes.
- Blockchain Layer: Anchors verification proof.
- Badge/UI: Shows verified result.

6. Demo Scenario (1–2 min)

1. Upload a celebrity deepfake video.
2. AI flags content as 90% synthetic.
3. Proof minted on-chain.
4. Judges see instant DeepTrust badge on the dashboard.

Closing Statement

With DeepTrust, the digital world finally has a decentralized truth layer — protecting creators, collectors, and the integrity of information. Because in a world where AI can lie, trust must be verifiable.