AI Powered Voice Anti-Spoofing System

Hackathon Problem Statement

The rapid rise of AI-generated voice deepfakes and voice cloning has made voice-based authentication systems highly vulnerable to fraud, impersonation, and social engineering attacks. With only a few seconds of audio, attackers can now create synthetic voices that convincingly mimic real individuals, posing serious risks to banking, customer support, smart devices, and digital communication platforms. Existing methods struggle to reliably distinguish genuine speech from synthetic or manipulated audio in real-world conditions. Motivated by the rising misuse of deepfake voices in financial scams and unauthorized access, this project aims to develop an efficient AI-powered voice anti-spoofing system that can accurately detect and prevent spoofed audio while remaining lightweight for practical applications.