AI-GENERATED VIDEO DETECTION REPORT

Prediction: Fake, Confidence: 99.37%

Anomalous Frames

RGB Frame: frame_00122.png

RGB Frame: frame_00087.png

Optical Flow: frame_00146.png

Optical Flow: frame_00066.png

Visual Consistency

The RGB frames depict a scene with a cat walking on a stage, surrounded by an audience. On examining the frames, slight inconsistencies are apparent in the lighting and texture details. The lighting appears somewhat unnatural, with shadows and highlights not aligning seamlessly with the expected sources, such as the overhead lights. This can indicate issues that often arise in AI-generated content, where lighting is computationally added rather than naturally occurring. Furthermore, the textures on the cat and the background are somewhat smooth and lack the detail typically expected in high-resolution real footage, which suggests synthetic image generation.

Motion Analysis

The optical flow patterns provide additional insight into the motion dynamics of the video. In natural video sequences, optical flow should show smooth, continuous, and physically plausible motion trajectories. However, in these flow visualizations, there are noticeable abrupt changes and irregular patterns, particularly around the edges of the moving objects, such as the cat's legs and tail. This inconsistent motion can be an indication of AI generation artifacts, where temporal coherence (the seamless progression of movement over time) is not perfectly achieved, resulting in jittery or unnatural motion representations between frames.

Technical Indicators

Specific technical indicators suggesting AI generation include the presence of uniform textures and evident boundary artifacts. In the RGB frames, potential generation errors are indicated by the smoothing of textures, which lack the expected fine details and variations. The optical flow analysis highlights artifacts such as unusual color bands and discontinuities that are not typically present in real-world captured motion. These elements are often characteristic of generative models that struggle with maintaining spatial and temporal consistency across sequences.

Overall Assessment

Combining the visual and motion analyses, it becomes clear why this video has been classified as "Fake" with high confidence. The RGB frames exhibit lighting and texture inconsistencies indicative of synthetic generation, while the optical flow patterns demonstrate irregularities in motion continuity and coherence. These combined factors strongly suggest that the content is AI-generated. The classification aligns with expectations when synthesizing media where technical flaws become apparent under detailed analysis, confirming the non-authentic nature of the footage with significant confidence.