Visual and video evidence lab

Reviews SHA-256, EXIF/IFD1, C2PA, JPEG compression, scene, OCR, and visual-similarity signals together on-device.

PROCESSING BOUNDARY
Runs locally in your browser

PURPOSE OF THE SITE

This site exists to turn one question into a safe, repeatable research process. A tool result is not a verdict; the source and the human check stay visible.

WHY DID I BUILD IT?

I built this local lab to keep file identity, technical signals, and analyst judgement separate during image and video review.

TECHNICAL ARCHITECTURE

From the file boundary to local measurement, human review, and a record you can keep

01 FILE BOUNDARY

MIME, extension, file-header, count, byte, and pixel validation; on-device SHA-256.

02 LOCAL EXTRACTION

EXIF/IFD1, C2PA, JPEG QT, scene keyframes, and TR/EN OCR.

03 VISUAL MEASUREMENT

64×64 luma, DCT pHash, dHash, crop search, and difference regions.

04 EVIDENCE PACKAGE

ZIP with JSON, Markdown, checksums, previews, keyframes, and OCR.

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USE IT STEP BY STEP

Step 1

Validate and identify the file

MIME, extension, and file headers are checked across up to 8 files. Byte and pixel limits apply before decoding; SHA-256 is calculated on-device and the CC0 hash is verified.

Step 2

Extract metadata and provenance records

The lab reads EXIF fields, an IFD1 JPEG preview bounded to 4 MiB and 4 MP, JPEG quantization tables, and signature and trust records from the official C2PA browser SDK.

Step 3

Measure and compare visual structure

Images and keyframes are normalized to a 64×64 luma grid. DCT pHash, dHash, scene change, TR/EN OCR, crop search, and connected difference regions with a median + MAD threshold are calculated.

Step 4

Complete human review and keep the record

Check every marker against the original file and source chain. Then download the ZIP containing JSON, Markdown, checksums, extracted preview, keyframes, and OCR; original files are excluded.

HONEST BOUNDARY

This lab produces review signals; it does not decide source identity, capture location, authenticity, or manipulation. The CC0 sample demonstrates the method and is not a real case. Advanced model review is a separate upload only after explicit consent.