

Team Matrix- Elite Hacker

Case Study: Digital Photo Forensics – Verifying Viral Animal Images




(a) Picture A



(b) Picture B

Two pictures (picA and picB) were widely shared on Facebook and Instagram with the claim that they show a newly discovered **four-eyed animal in South Sudan**. These images quickly went viral, with thousands of users reposting them without verification.

As a **Digital Forensic Investigator**, you are tasked to analyze these photographs and verify their authenticity.

Picture:  Team Matrix Assignment

Questions:

1. Claim Verification:

- What was the viral claim associated with these two images on social media?
- Why is it necessary to perform digital forensic analysis before accepting such claims as true?

2. Image Metadata & Technical Analysis:

- Which key metadata elements (file type, dimensions, color channels, editing software) were found in Image A and Image B?
- What do the Error Level Analysis (ELA) and hidden pixel padding results suggest about the images?

3. Authenticity Check:

- Based on forensic findings, do these images represent a real animal or something else?
- How did the forensic report determine that the photos were edited and linked to an artwork?

4. Cultural & Artistic Context:

- What is the actual origin of these images according to reverse-image search?
- Who is the artist behind these sculptures and what mythical creature do they represent?

5. Final Forensic Conclusion:

- What was the conclusion of the forensic investigation regarding the existence of a “four-eyed animal” in South Sudan?
- Why is it important to distinguish between digital artwork and biological reality in such viral cases?