Homework: Reflection on Detecting Fake Images

Task 1

If I were advising National Geographic, then I would suggest they work with camera manufacturers to develop a certificate that attaches to photos in a camera. The idea is when a photo is taken attach a certificate or hash that is unique to that photo and camera. Any time a new photo is edited the certificate or hash would change in accordance with the new image. National Geographic, would then only allow submissions from cameras with this technology. We already attach metadata to photos and shoot raw images large in file size.

In the short term they need to loosen their rules on editing. Many of the photos presented in the video had slight and reasonable amounts of editing. Setting a limit higher than it is now would in my opinion help them to focus on AI. There would be a need to include any photo editing software along with submitting any originals.

For AI there is no one way to detect it and everyday it gets better and harder to detect. Photos are going to have to be closely reviewed by both people and AI built to detect there own work. I think along side other rules like turning in other photos and raw images we can get close but not perfect. This is why I came back to the idea of a unique hash or certificate, kind of like an NFT. I way to detect in the code of the image that it is the original.

Task 2

I am a hobbyist photographer already. I’ve never sent in any of my work for a competition. After watching the video, it sounds like it is often a requirement to send any photos before or after the photo submitted for the competition. Assuming that with the photo metadata they can confirm they came from the same camera and in what order it happened. I think this is a great first measure, but it is not perfect. The second most obvious would be a witness or multiple willing to sign a legal document affirming the photo’s authenticity. If a witness is unavailable, then maybe attach a GoPro like camera to the top of the main camera that is always pointed in the same direction that is capturing video.

To help confirm the lack of AI and level of editing I would still suggest any original raw photos be sent in alongside the submissions.

References

Thomas Heaton. (2023, November 22). *Photographers who got caught cheating* [Video]. YouTube. https://www.youtube.com/watch?v=WXAavnORAxg