

The policy begins: The “Proof of Humanity” curated registry of humans is a system combining social verification with video submission to create a Sybil-proof list of humans.

This statement shows not only the purpose of the registry, but also how it is achieved.

Social verification is done by humans at different stages in Proof of Humanity: Vouchers that trust an ethereum address or the profile submitter, challengers of pending submissions that they think don't comply with the requirements for acceptance, and Kleros jurors that vote if the challenged profile complies with the policy at all or not.

In all of these stages we need social verification to curate the registry in a decentralized way.

Evidence #5 says that a tool from a centralized company like Microsoft returned a 93% confidence that the submission photo and a frame from the video are the same person, and evidence #6 says that a proprietary tool can identify a face in the video. I argue the following:

- 1) Is it enough to validate that the person in the picture is the same as the person in the video? That there is a face in the video? What about duplicate profiles? Can we spot duplicates with this poor video quality that makes it impossible for humans to discern facial features? The policy has a set of rules to make social verification easier. Even faces.humanity.tools, that brings results of possible duplicates >99% of the time, does not bring any result when checking this profile and others that were rejected due to poor quality or lack of facial features (ie. disputes #615, #632 and #742).
- 2) If a tool from a centralized company is more valid to accept the profile, why do we need humans to vouch, challenge and jurors to vote? Would it be a good idea to integrate Microsoft software to PoH and pay them for every API request?

Even if we consider an auditable face recognition tool like VGGFace, are we going to ask non-tech savvy people to download the source code and run it to look for duplicates? One profile by one? Comparing the profile picture with the video only, or finding a face in the shadows does not help against duplicates. This tool should be integrated into PoH and be user friendly first if we want to replace social verification and still have a Sybil-proof list of humans.

The registry must be curated to have value, and in order to curate this registry in a decentralized way we still need to keep doing social verification as the policy states. The last decision to vouch, challenge or vote in PoH court is made by humans, not bots, not a tool from a centralized company. Video quality matters a lot to achieve the goal.

This is why: 1) Faces should not be covered under heavy make-up, large piercings or masks hindering the visibility of facial features, 2) We need pictures and videos front facing the camera, and 3) Lighting conditions and recording device quality should be sufficient to discern facial features. And it is also why the last rule of section #4 states that the face of the submitter in the video should follow the requirements of section #2 (Picture).

It would be dangerous to set a precedent that this video quality is enough for social verification. It will encourage malicious actors to try poor quality entries in the registry and facilitate Sybil attacks. Thank you for reading.