

| Criteria for Multiple Modalities  |   |   |
|---|---|---|
| AI video/image traits adapted from Kamali et al. [25]   |   |   |
| Real (no AI manipulation)   | Fake (AI manipulation)  | Unknown   |
| Original, reputable source confirms no AI manipulation  | If any portion is AI, then entire item is fake  | Cartoons, animations, and photoshopped images such as swapped signs, hats, or t-shirts (unless evidence of AI manipulation) |
| Real media in which a person is lying, or real images presented out of context and misleading | Fact-checking source confirms AI manipulation   | Unable to confirm AI manipulation or not  |
| Fact-checking source confirms no AI manipulation  | <p>Contains 3+ of the following AI traits:</p> <p><b>Stylistic Artifacts:</b></p> <ul style="list-style-type: none"> <li>• Hyper-realistic or inconsistent detail</li> <li>• Skin (Example_1) too smooth or plastic/waxy</li> <li>• Looks slightly cartoonish (Example_2)</li> <li>• Too perfect</li> <li>• Lighting or reflections are inconsistent</li> </ul> <p><b>Anatomical Implausibilities:</b></p> <ul style="list-style-type: none"> <li>• Irregular pupils</li> <li>• Mangled, missing, disproportionate limbs, hands, feet</li> <li>• Incorrect number of fingers, merged fingers</li> </ul> |   |

|  |  |   |
|--|--|---|
|  | <ul style="list-style-type: none"> <li>• Facial features of famous people are inconsistent with their real images</li> </ul> <p><b>Sociocultural Implausibilities:</b></p> <ul style="list-style-type: none"> <li>• Unlikely Scenarios (ie. Trump and Biden knitting sweaters together, the Pope wearing a rainbow shawl)</li> <li>• Historical Inaccuracies (ie. JFK being arrested)</li> </ul> <p><b>Functional Implausibilities:</b></p> <ul style="list-style-type: none"> <li>• Text backwards, misspelled, fictional words</li> <li>• Parts of buildings, vehicles, food impossible</li> <li>• Two grips on a gun</li> </ul> |   |
|  | Face swapping and face morphing for media created in 2023 or later   | Face swapping and face morphing for media created prior to 2023 |
| Content from film or TV with no evidence of AI manipulation  |  |   |
| Media manipulation using text and non-AI-generated image overlays such as stickers are categorized as Real (Example_3 Example_4) |  |   |

## Video Codebook

| Criteria   |   |   |
|--|---|---|
| Real (no AI manipulation)  | Fake (AI manipulation)  | Unknown   |
| Lips and mouth are crisp, clear, nuanced, and match sound perfectly.   | Lips are roughly in sync (Example_5) with audio, but clearly not crisp or natural |   |
| Lips and audio are completely out of sync (Example_6), (and you find original source to confirm that audio was dubbed onto a real video) |   | Lips and audio are completely out of sync (Example_6), but you cannot find the original source to confirm if video is real or manipulated |
| Located original source and confirmed no AI manipulation   | Located original source and confirmed AI manipulation was used                    | Video quality is too poor to determine if mouth movements are crisp and nuanced   |
| Highly edited (Example_7), but every individual clip is real   |   | Filters (Example_8), effects, GIFs  |
| Real person is obviously “lip syncing” (Example_9) or parody, no evidence of AI manipulation. Example                                    |   |   |
| Talking head (Example_10) pasted on background (many tiktoks)  |   |   |

## Audio Codebook

| Criteria   |  |   |
|--|--|---|
| Real (no AI manipulation)  | Fake (AI manipulation)   | Unknown   |
| Lips and mouth are crisp, clear, nuanced, and match sound perfectly.                                       | If lip sync is off AND 2 or more audio models say >80%   | If lip sync is off and you cannot discern if AI or human impersonator |
| Music, silence, and sound effects were labeled as real unless there was other evidence of AI manipulation. | Audio-Only: if 2 or more models say >80% PLUS there's some additional reason to believe it's fake (ie. the audio quality sounds synthetic)<br>Example_11 | Voice is off camera and unable to locate original source              |
| human impersonator (Example_12)  |  |   |