

Boogaloo Bias

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Boogaloo Bias is an interactive artwork and research project that addresses some of the known problems with the unregulated use of facial recognition technologies, including the practice of ‘brute forcing’ where, in the absence of high-quality images of a suspect, law enforcement agents have been known to substitute images of celebrities the suspect is reported to resemble. To lampoon this approach, the *Boogaloo Bias* facial recognition algorithm searches for members of the anti-law enforcement militia, the Boogaloo Bois, using a facial recognition algorithm trained on faces of characters from the 1984 movie *Breakin’ 2: Electric Boogaloo*. The film is the namesake for the Boogaloo Bois, an anti-law enforcement militia that emerged from 4chan meme culture. They have been present at both right and left-wing protests in the US since January 2020. The system is used to search live video feeds, protest footage, and images that are uploaded to the *Boogaloo Bias* website. All matches made by the system are false positives. No information from the live feeds or website uploads is saved or shared.

Keywords artificial intelligence,
surveillance, facial recognition,
tactical media, technocratic
solutionism

Description

Boogaloo Bias raises questions about automated decision making, public accountability and oversight within a socio-technical system where machines are contributing to a decision-making process. Facial recognition technology allows for the quick surveillance of hundreds of people simultaneously and the ability to automate decisions using artificial intelligence, establishing a power structure controlled by a technocratic elite. Rather than providing a solution for how to improve facial recognition, the project pushes the logic behind the current forms and uses of facial recognition in law enforcement to an extreme, highlighting the absurdity of how this technology is being developed and used. Law enforcement currently uses images of celebrity doppelgängers to find suspects. In *Boogaloo Bias*, the corpus of training images is based solely on fictional characters, leading only to false positives.

Participants can interact with the *Boogaloo Bias* facial recognition algorithm in an installation through a live CCTV camera and see which *Breakin' 2* characters the system finds to be similar. They can see how their matched character sometimes changes as they move their head or change facial expressions, revealing how easily this practice can be compromised. Online viewers can experiment with the system by uploading images of themselves or their friends. Both the physical and virtual presentations of the project feature videos of protests scanned by the facial recognition system and social network analysis (SNA) diagrams that viewers can interact with. One SNA diagram is a manual mapping of the relationships between the characters in the film while a second diagram draws connections between the characters algorithmically using the *Boogaloo Bias* facial recognition system. An online resource library links to articles and research about the unregulated use of facial recognition in the United States, the Boogaloo Bois militia, and the use of SNA diagrams by law enforcement to understand, predict, and intervene in human behavior.

The interactive experience in *Boogaloo Bias* demonstrates how unregulated surveillance technology without public oversight can lead to absurdly erroneous results. The project draws from a number of academic and journalistic sources, including a study by the Georgetown Law Center on Privacy and Technology, which found that because there are “no rules when it comes to what images police can submit to face recognition algorithms to generate investigative leads,” agents have been known to substitute not only low-quality images from CCTVs, but hand-drawn forensic sketches, proxy images generated from artist sketches, and images of celebrities thought to resemble a suspect (Angelyn, 2019). The project also reveals problems that arise from using low accuracy thresholds. While some tech companies have stressed that police should use confidence thresholds between 95% to 99%, law enforcement agencies often use low, out-of-the-box accuracy levels of 80% to maximize investigative leads

(Wood, 2018; Levin, 2018). The *Boogaloo Bias* system returns every match, highlighting matches that are above the 80% out-of-the-box threshold, so participants can see the impact of accuracy thresholds on matches the system returns.

Fig. 1. *Boogaloo Bias* interactive installation at Science Gallery Detroit with participants.

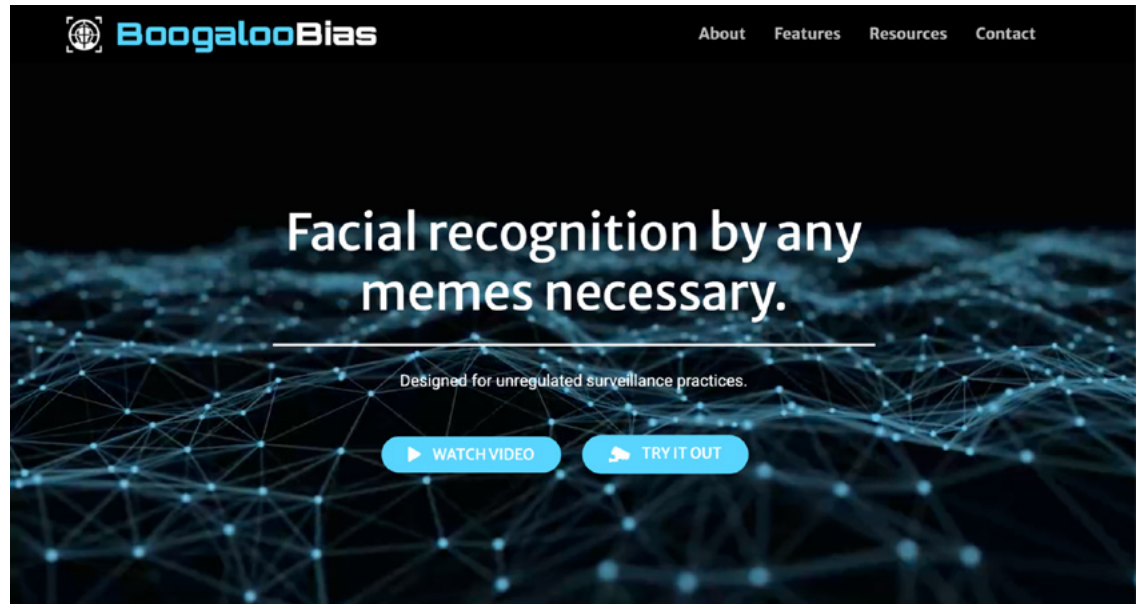


Fig. 2. Screenshot of *Boogaloo Bias* facial recognition system analyzing news footage of an anti-gun control protest.



A man in a white shirt and tie, wearing glasses, stands in a dark room, looking at a tablet. He is surrounded by multiple computer monitors displaying various images, including a meme featuring a man with a mustache and the text "BOOGALOO" and "STOP THE BOOGALOO".

Fig. 5. *Boogaloo Bias* website home page.



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Project website and online application: <https://www.boogaloo-bias.art/>
Project video: <https://vimeo.com/641009130>

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