

Congress of the United States
Washington, DC 20515

May 25, 2018

Jeffrey P. Bezos
CEO
Amazon, Inc.
410 Terry Avenue North
Seattle, Washington 98109

Dear Mr. Bezos:

I write to request information on the use of Amazon's facial recognition technology, Rekognition, by United States law enforcement agencies. Among other things, I wish to know how many, and which law enforcement agencies are using Rekognition. In an ever-evolving technological landscape, it is important that the Fourth and First Amendment rights of all people be protected.

According to a page on the Amazon Web Services (AWS) website, Rekognition is a "deep learning-based image recognition service which allows you to search, verify and organize millions of images."¹ The same web page describes Rekognition as a tool for performing "real-time face searches against collections with tens of millions of faces."² Amazon's website lists the Washington County Sheriff's Department and the City of Orlando Police Department as Rekognition customers.³

A series of studies have shown that face recognition technology is consistently less accurate in identifying the faces of African Americans and women as compared to Caucasians and men.⁴⁵ The disproportionately high arrest rates for members of the black community⁶ make the use of facial recognition technology by law enforcement problematic, because it could serve to reinforce this trend.

Facial recognition technology, when used in concert with wearable body camera technology by the police, raises significant Fourth Amendment concerns about warrantless surveillance. It is therefore troubling that emails between Amazon and the Washington County Sheriff's Department in Oregon obtained by the American Civil Liberties Union of Northern California and the ACLU of Oregon indicate that the company offered to connect Washington County with a body camera manufacturer.⁷

To better understand Rekognition's use by law enforcement agencies, I seek the following information:

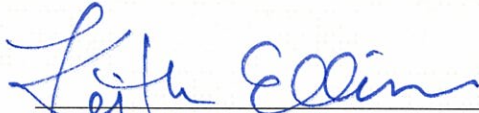
1. Which law enforcement agencies, in addition to Washington County, Oregon and the City of Orlando currently use Amazon's Rekognition Software? Please provide a list of law enforcement customers that are currently using Rekognition. Please provide a list of any such customers who use the Rekognition facial recognition feature.

2. Please provide a list of the law enforcement agencies AWS has offered the Rekognition services to, as well as any agencies it has assisted in the deployment of the services. Please provide any and all written communications between Amazon and law enforcement agencies referencing the Rekognition services.
3. Please provide a list of current Rekognition users that are law enforcement agencies and that have been investigated, sued, or otherwise reprimanded for engaging in unlawful or discriminatory policing practices.
4. Please identify any government customers who are currently using the Rekognition facial-recognition tool in real-time, as opposed to face recognition on static images.
5. Which private sector Rekognition customers develop software products for law enforcement agencies' use based on the Rekognition platform? Please provide a list of any Rekognition customers that design or market Rekognition-based products for use by law enforcement users.
6. Please describe, and provide the results of, any independent auditing that AWS has conducted and that was designed to identify differential error rates or bias in the operation of the Rekognition machine learning system, including any auditing that considers these effects with regard to race, gender, age and skin tone.
7. Please describe steps AWS has taken to address any identified differential error rates or bias identified in the Rekognition system as well as any preventative steps AWS has taken to protect against biased search results.
8. What messages or warnings does AWS provide its customers about potential errors, and potential bias, in Rekognition search results?
9. Please provide a copy of any terms of use, policies, or other restrictions that AWS places on Rekognition customers or the end users of Rekognition customers who build products using Rekognition.
10. Many American law enforcement agencies have adopted officer-worn body cameras with the goal of "building trust and transparency between law enforcement and the communities they serve."⁸ Amazon has advertised Rekognition for use with officer body cameras, a use that could transform these devices from tools designed for officer accountability into surveillance devices aimed at the public. Please provide any email correspondence and documentation from AWS relating to the use of Rekognition with wearable body camera technology.⁹
11. Law enforcement Rekognition customers may be relying on conclusions drawn by Rekognition about a person's identity when making life-or-death decisions about arrest, detention, or the use of force. What affirmative steps is Amazon taking to ensure that law enforcement officials do not use Rekognition in the field or other situations where there is a risk of serious harm to local communities stemming from inaccurate information?
12. Amazon markets Rekognition as being capable of identifying various demographic attributes, including gender and age.¹⁰ Research has demonstrated that machine learning systems produce disparate results depending on demographic factors such as race and

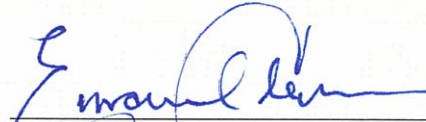
gender.¹¹ What steps is Amazon taking to ensure that Rekognition is not facilitating systems that disproportionately impact people based on protected characteristics in potential violation of federal civil rights laws?

I respectfully request answers to my questions by June 20, 2018.

Sincerely,



Keith Ellison
Member of Congress



Emanuel Cleaver, II
Member of Congress

Cc: The Honorable Jefferson B. Sessions, III
Attorney General

¹ Das, R. "Amazon Rekognition Announces Real-Time Face Recognition, Support for Recognition of Text in Image, and Improved Face Detection." *Amazon Website*. (November 21, 2017). Online at: <https://aws.amazon.com/blogs/machine-learning/amazon-rekognition-announces-real-time-face-recognition-support-for-recognition-of-text-in-image-and-improved-face-detection/>.

² Ibid.

³ "Amazon Rekognition Customers." *Amazon Website*. (Accessed May 22, 2018). Online at: <https://aws.amazon.com/rekognition/customers/>

⁴ Klare, B. "Face Recognition Performance: Role of Demographic Information." *IEEE Transactions on Information and Security*. (October 9, 2012). Online at: <https://ieeexplore.ieee.org/document/6327355/>.

⁵ Buolamwini, J. "Gender Shades: Intersectional Identity Accuracy Disparities in Commercial Gender Classification." *Proceedings of Machine Learning Research*. Online at: <http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>.

⁶ Gross, S. "Race and Wrongful Convictions in the United States." *National Registry of Exonerations*. (March 7, 2017). Online at: https://www.law.umich.edu/special/exoneration/Documents/Race_and_Wrongful_Convictions.pdf.

⁷ Cagle, M. "Amazon Teams Up with Law Enforcement to Deploy Dangerous New Facial Recognition Technology." *ACLU*. (May 22, 2018). Online at: <https://www.aclu.org/blog/privacy-technology/surveillance-technologies/amazon-teams-law-enforcement-deploy-dangerous-new>

⁸ "Justice Department Awards over \$23 Million in Funding for Body Worn Camera Pilot Program to Support Law Enforcement Agencies in 32 States." (Sept. 21, 2015). Online at: <https://www.justice.gov/opa/pr/justice-department-awards-over-23-million-funding-body-worn-camera-pilot-program-support-law>.

⁹ "Amazon Rekognition Customers." *Amazon Website*. (Accessed May 22, 2018). Online at: <https://aws.amazon.com/rekognition/customers/>.

¹⁰ "Data Types: Amazon Rekognition product documentation." *Amazon Website*. (Accessed May 23, 2018). Online at: https://docs.aws.amazon.com/rekognition/latest/dg/API_Types.html.

¹¹ Simonite, T. "Photo Algorithms ID White Men Fine – Black Women, Not So Much." *Wired.com* (Feb. 6, 2018). Online at: <https://www.wired.com/story/photo-algorithms-id-white-men-fineblack-women-not-so-much/>.