

**Congress of the United States**  
**Washington, DC 20515**

July 26, 2018

Mr. Jeffery Bezos  
Chief Executive Officer  
Amazon.com, Inc.  
410 Terry Avenue N.  
Seattle, WA 9809

Dear Mr. Bezos,

We write to express our concerns and seek more information about Amazon’s facial recognition technology, Rekognition, and its sale to law enforcement. While facial recognition services might provide a valuable law enforcement tool, the efficacy and impact of the technology are not yet fully understood. In particular, serious concerns have been raised about the dangers facial recognition can pose to privacy and civil rights, especially when it is used as a tool of government surveillance, as well as the accuracy of the technology and its disproportionate impact on communities of color.<sup>1</sup> These concerns, including recent reports that Rekognition could lead to misidentifications,<sup>2</sup> raise serious questions regarding whether Amazon should be selling its technology to law enforcement at this time.

One study estimates that over 117 million American adults are in facial recognition databases that can be searched in criminal investigations.<sup>3</sup> This figure reveals just how broadly our privacy and civil rights are implicated by the proliferation of facial recognition. Moreover, these concerns only grow as companies like Amazon and police departments each seek to expand the technology’s use in the criminal justice system without sufficient oversight. Notably, neither Congress nor state legislatures have passed laws explicitly authorizing the use of facial recognition by law enforcement.

Further, although some companies marketing their facial recognition algorithms claim high accuracy rates, independent audits are voluntary and infrequent.<sup>4</sup> A 2018 paper from M.I.T. found that although three different facial recognition algorithms could successfully recognize a light-skinned male 99% of the time, the same systems misidentified darker-skinned women up to

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<sup>1</sup> See e.g., GEORGETOWN LAW CTR. ON PRIVACY & TECH., *THE PERPETUAL LINE-UP: UNREGULATED POLICE FACE RECOGNITION IN AMERICA* (2016), <https://www.perpetuallineup.org> [hereinafter “The Perpetual Line-Up”]; GOV’T ACCOUNTABILITY OFFICE, GAO-16-267, *FACE RECOGNITION TECHNOLOGY: FBI SHOULD BETTER ENSURE PRIVACY AND ACCURACY* (2016), <https://www.gao.gov/assets/680/677098.pdf>.

<sup>2</sup> Jacob Snow, *Amazon’s Face Recognition Falsely Matched 28 Members of Congress With Mugshots*, ACLU.ORG (July 25, 2018), <https://www.aclu.org/blog/privacy-technology/surveillance-technologies/amazons-face-recognition-falsely-matched-28> [hereinafter “ACLU Report”].

<sup>3</sup> The Perpetual Line-Up, *supra* note 1.

<sup>4</sup> Clare Garvie and Jonathan Frankle, *Facial-Recognition Software Might Have a Racial Bias Problem*, THE ATLANTIC (April 7, 2016), <https://www.theatlantic.com/technology/archive/2016/04/the-underlying-bias-of-facial-recognition-systems/476991>.

35% of the time.<sup>5</sup> These discrepancies are particularly troubling when one considers the disproportionate impact of policing tactics and technology on communities of color.

Recognizing these concerns, Amazon employees,<sup>6</sup> Amazon shareholders,<sup>7</sup> and a coalition of nearly seventy civil rights organizations<sup>8</sup> have all called on your company to halt the sale of Rekognition to law enforcement. Additionally, the ACLU recently conducted its own independent test of Amazon Rekognition, comparing images of all 535 Members of Congress to a set of public arrest photos. The ACLU found that your system produced 28 false matches in this test alone using the default match threshold – including falsely recognizing the authors of this letter in the mugshots.<sup>9</sup> Members of Congress with darker skin pigmentation were disproportionately represented in these misidentifications.

In light of this, we respectfully request that you provide answers to the following questions about Amazon Rekognition and its sale to law enforcement by August 20, 2018:

- 1) Please provide the results of any internal accuracy or bias assessments that Amazon has performed on Rekognition. Please provide this information broken down and in combination for race, gender, skin pigmentation, and age.
  - a. Please describe in detail how Amazon tests for facial recognition accuracy, how often Amazon tests, and whether these results have been independently verified.
  - b. Please also describe in detail how Amazon tests for bias in its facial recognition results, especially racial bias.
- 2) Please provide a list of all law enforcement or intelligence agencies that (1) Amazon has contacted or otherwise communicated with regarding acquisition of Rekognition, and (2) currently use the Rekognition service. In addition to your response to this letter, we encourage Amazon to include a list of government Rekognition customers in its next transparency report.
- 3) Have any law enforcement agencies that used or are using Rekognition been investigated, sued, or otherwise reprimanded for engaging in unlawful or discriminatory policing practices? Does Amazon consider whether law enforcement agencies have a history of unlawful or discriminatory policing practices when deciding to whom it will market or sell Rekognition?

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<sup>5</sup> Steve Lohr, *Facial Recognition Is Accurate, if You're a White Guy*, N.Y. TIMES (Feb. 9, 2018), <https://www.nytimes.com/2018/02/09/technology/facial-recognition-race-artificial-intelligence.html>.

<sup>6</sup> Ali Breland, *Amazon employees protest sale of facial recognition tech to law enforcement*, THE HILL (June 21, 2018), <http://thehill.com/business-a-lobbying/393583-amazon-employees-protest-sale-of-facial-recognition-tech-to-law>.

<sup>7</sup> Jamie Condliffe, *Amazon Urged Not to Sell Facial Recognition Technology to Police*, N.Y. TIMES (June 19, 2018), <https://www.nytimes.com/2018/06/19/business/dealbook/amazon-facial-recognition.html>.

<sup>8</sup> Nick Wingfield, *Amazon Pushes Facial Recognition to Police. Critics See Surveillance Risk*, N.Y. TIMES (May 22, 2018), <https://www.nytimes.com/2018/05/22/technology/amazon-facial-recognition.html>.

<sup>9</sup> ACLU Report, *supra* note 2.

- 4) Does Amazon build protections into the Rekognition system to protect the privacy rights of innocent Americans caught up in either the biometric databases used by law enforcement for comparisons, or in the data law enforcement uses to search those databases? Does Amazon Rekognition contain a mechanism for automatically deleting unused biometric data?
- 5) Can Rekognition recognize whether the biometric data uploaded to its system includes children under the age of 13? If yes, are there any protections to ensure the privacy of such children and how does Amazon follow the Children's Online Privacy Protection Act?
- 6) Does Amazon conduct any audits of Rekognition use by law enforcement to ensure that (1) the software is not being abused for secretive government surveillance, (2) the software is not facilitating systems that disproportionately impact people based on protected characteristics in potential violation of federal civil rights laws, and (3) the software is not being used in violation of Amazon's terms of use? If so, what steps does Amazon take to end any such uses of Rekognition?
- 7) Is Amazon Rekognition currently integrated with any police body-camera technology or existing public-facing camera networks? If so, please identify any government customers or end users that Amazon knows to be using Rekognition in body-cameras or with public-facing camera networks. Additionally, please identify any government customers using Rekognition for continual, real-time facial recognition of the public.

Sincerely,



Edward J. Markey  
United States Senator



Luis V. Gutiérrez  
Member of Congress



Mark DeSaulnier  
Member of Congress