

Sent via e-mail

August 18, 2022

Lina M. Khan, Chair
Rebecca Kelly Slaughter, Commissioner
Christine S. Wilson, Commissioner
Noah Joshua Phillips, Commissioner
Alvaro Bedoya, Commissioner
Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

Re: Supplemental information concerning *In re Airbnb* complaint

Dear Chair Khan and Commissioners Slaughter, Wilson, Phillips, and Bedoya;

The Electronic Privacy Information Center (EPIC) writes to alert the Federal Trade Commission (FTC) to an automated decision-making system recently introduced by Airbnb, Inc., that poses a significant risk of unlawful discrimination and harm to consumers.

On August 16, 2022, Airbnb announced that it will soon deploy “anti-party technology” in the United States to “help identify potentially high-risk reservations and prevent those users from taking advantage of [the Airbnb] platform.”¹ Although Airbnb will use this technology to dictate housing outcomes, the company has not disclosed the logic or full range of factors on which the system relies and has failed to establish that the system is accurate, fair, or free from the impermissible bias routinely exhibited by automated decision-making systems.² EPIC urges the FTC to investigate this technology and Airbnb’s reliance on algorithms generally to make housing determinations, including the system previously highlighted in EPIC’s complaint to the FTC concerning Airbnb.³

¹ Airbnb, *Airbnb introduces new anti-party technology in US and Canada* (Aug. 16, 2022), <https://news.airbnb.com/airbnb-introduces-new-anti-party-technology-in-us-and-canada/>.

² See e.g., James Vincent, *Google ‘fixed’ its racist algorithm by removing gorillas from its image-labeling tech*, The Verge (Jan. 12, 2018), <https://www.theverge.com/2018/1/12/16882408/google-racist-gorillas-photo-recognition-algorithm-ai> (reporting that Google fixed Google Images’ mis-categorization of Black persons as gorillas by removing the service’s ability to identify gorillas outright); Emmanuel Martinez & Lauren Kirchner, *The Secret Bias Hidden in Mortgage-Approval Algorithms*, The Markup (Aug. 25, 2021), <https://themarkup.org/denied/2021/08/25/the-secret-bias-hidden-in-mortgage-approval-algorithms> (reporting that mortgage loan applicants of color were 40%–80% more likely to be denied than their White counterparts, and that the disparity was over 250% in certain metro areas, even when accounting for factors such as income).

³ Complaint of EPIC, *In re Airbnb* (Feb. 26, 2020) [hereinafter “EPIC Complaint”], https://epic.org/wp-content/uploads/privacy/ftc/airbnb/EPIC_FTC_Airbnb_Complaint_Feb2020.pdf.

In 2020, EPIC alerted the FTC to Airbnb’s acquisition of Trooly, a company which had been granted a patent for automated decision-making technology that could purportedly “determin[e] trustworthiness and compatibility of a person.”⁴ According to the patent, the system uses sensitive personal information such as “name, email address, telephone number, geographic location, date of birth, social connections, employment history, education history, driver’s license number, financial account information, Internet Protocol (IP) address, and device identifier” to assign “trustworthiness” scores and “predict the likelihood of the person being a positive actor in an online or offline person to-person interaction.”⁵ The Airbnb system assigns personality traits to customers, including “badness, anti-social tendencies, goodness, conscientiousness, openness, extraversion, agreeableness, neuroticism, narcissism, Machiavellianism, or psychopathy.”⁶ The system also flags the use of “derogatory or angry words” to categorize an individual as having an anti-social personality⁷ and words associated with criminal activity—such as “arrest,” “indict,” “bond,” “convict,” “misdemeanor,” “petty theft,” “homicide,” “robbery,” and “assault”—to categorize an individual as having a propensity toward criminal behavior.⁸

As EPIC explained in its complaint, this “opaque, proprietary algorithm” is “unreliable and potentially unfair” and “present[s] an acute risk of bias.”⁹ Moreover, little is known about Airbnb’s use of the Trooly-developed system; the company informs users only that “Every Airbnb reservation is scored for risk before it’s confirmed. We use predictive analytics and machine learning to instantly evaluate hundreds of signals that help us flag and investigate suspicious activity before it happens.”¹⁰ EPIC’s complaint established that Airbnb’s system violated section 5 of the FTC Act and the Fair Credit Reporting Act and urged the Commission to take appropriate enforcement action.

The “anti-party technology” recently unveiled by Airbnb appears closely related and presents a similar risk of unlawful discrimination and harm to consumers.¹¹ According to Airbnb, when a user attempts to book a home through its platform, the company’s “anti-party technology” will identify “high-risk reservations” based on “factors like history of positive reviews (or lack of positive reviews), length of time the guest has been on Airbnb, length of the trip, distance to the listing, [and] weekend vs. weekday, **among many others.**”¹² If Airbnb’s “anti-party technology” determines that a user presents a high risk of hosting a party during their stay, the system may

⁴ U.S. Patent No. 9,070,088 (filed June 30, 2015) [hereinafter “Patent”].

⁵ Patent at 2.

⁶ Patent at 3.

⁷ *Id.*

⁸ Patent at 15.

⁹ EPIC Complaint ¶¶ 1, 39, 41.

¹⁰ Airbnb, *Trust & Safety* (2022), <https://www.airbnb.com/trust>. Similarly, Airbnb’s privacy policy states only that the company uses information it collects to “conduct security investigations and risk assessments.” Airbnb, *Privacy Policy for the United States* (2022), <https://www.airbnb.com/help/article/3176/privacy-policy-for-the-united-states>.

¹¹ Airbnb, *supra* note 1.

¹² *Id.* (emphasis added).

“prevent [the] reservation attempt from going through” and restrict the user to booking only a private room or hotel room.¹³

The factors relied on by Airbnb’s “anti-party technology” pose a substantial risk of disparate and unfair impact. For example, relying on the distance of a listing from a user’s location to block a reservation may operate as a form of digital redlining, limiting the ability of users from majority-minority areas to rent homes in particular locations. Similarly, basing housing determinations on whether the proposed reservation is for a weekend or weekday, the length of the proposed trip, and the length of the user’s time on Airbnb may impose unfair economic barriers—even when users could otherwise afford the proposed reservation. Low-income individuals may be unable to travel on weekdays because of job or childcare obligations and may not be able to take long trips or afford multiple nights. Airbnb also notes that the “anti-party technology” is a “more robust and sophisticated version” of its existing “under-25 system,” which “focuses primarily under the age of 25 without positive reviews who are booking locally.”¹⁴ This type of age-based discrimination—which may itself constitute an unfair trade practice—raises the possibility that Airbnb’s “anti-party technology” impermissibly discriminates against parents of children under 18, a protected class under the Fair Housing Act.¹⁵

Airbnb’s “anti-party technology” appears to be closely analogous to, if not an extension of, the automated decision-making technology that led to EPIC’s prior Airbnb complaint and raises the same bias, accuracy, opacity, and unverifiability concerns. Notably, these concerns are at the core of the FTC’s Advanced Notice of Proposed Rulemaking on commercial surveillance, which focuses on the prevalence of algorithmic error,¹⁶ the overstated reliability of automated decision-making systems,¹⁷ the use of automated decision-making systems in product access,¹⁸ and discrimination based on protected classes, including proxies and vulnerable classes that are not currently recognized as protected classes.¹⁹ Airbnb’s reliance on “anti-party technology” and similar algorithms also appears to violate “established public policies” within the meaning of the FTC Act. These include the Universal Guidelines for Artificial Intelligence²⁰ and the

¹³ *Id.*

¹⁴ *Id.*

¹⁵ 42 U.S.C. § 3602(k).

¹⁶ Fed. Trade Comm’n, *Advance Notice of Proposed Rulemaking: Trade Regulation Rule on Commercial Surveillance and Data Security* 34 (Aug. 11, 2022).

¹⁷ *Id.*

¹⁸ *Id.* at 35.

¹⁹ *Id.* at 36.

²⁰ The Public Voice, *The Universal Guidelines for Artificial Intelligence* (2018), <https://thepublicvoice.org/ai-universal-guidelines/>. The UGAI comprise twelve principles: Right to Transparency; Right to Human Determination; Identification Obligation; Fairness Obligation; Assessment and Accountability Obligation; Accuracy, Reliability, and Validity Obligations; Data Quality Obligation; Public Safety Obligation; Cybersecurity Obligation; Prohibition on Secret Profiling; Prohibition on Unitary Scoring; and Termination Obligation. *Id.*

Organisation for Economic Co-Operation and Development’s AI Principles,²¹ which impose transparency, accountability, accuracy, fairness, and reliability requirements.

EPIC urges the FTC to investigate Airbnb’s use of “anti-party technology” and similar automated decision-making tools and to take appropriate enforcement action, including but not limited to requiring Airbnb to publish complete information about the factors and logic of such systems and to undergo published, independent testing of the accuracy and civil rights impacts of such systems prior to use.

Please don’t hesitate to reach out to us for additional information at davisson@epic.org and winters@epic.org.

Respectfully submitted,

/s/ John Davisson

John Davisson

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/s/ Ben Winters

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²¹ *Recommendation of the Council on Artificial Intelligence*, OECD (May 21, 2019), legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449. The OECD Principles are: Human Centered Values and Fairness; Robustness, Security, and Safety; Transparency and Explainability; and Accountability. *Id.*