UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

CHRISTIAN W. SANDVIG *et al.*, Plaintiffs, v. WILLIAM P. BARR, in his official capacity as Attorney General of the United States, Defendant.	Case No. 1:16-cv-1368 (JDB)

PLAINTIFFS' REPLY TO DEFENDANT'S RESPONSE TO PLAINTIFFS' STATEMENT OF MATERIAL FACTS NOT IN DISPUTE

Plaintiffs Alan Mislove and Christopher "Christo" Wilson file this Reply to Defendant's Response to Plaintiffs' Statement of Material Facts Not in Dispute, ECF Nos. 50-3 and 51-2 ("Def. Resp."), pursuant to Fed. R. Civ. P. 56(c) and Local Rule 7(h). This Reply is in support of Plaintiffs' Motion for Summary Judgment, ECF No. 47; *see also* Plaintiffs' Statement of Undisputed Material Facts, ECF No. 47-2.

In an effort to avoid repetition, Plaintiffs here set forth several objections that recur throughout their Reply.

Certain of Defendant's purported factual responses fail to cite specific evidence demonstrating disputed issues of fact. *See* Fed. R. Civ. P. 56(c); Local Rule 7(h)(1) (an assertion of a "genuine issue" "shall include references to the parts of the record relied on to support the statement"). Plaintiffs hereby refer to this objection as "No record dispute."

Additionally, Plaintiffs object to Defendant's contention that this Court should not take judicial notice of the truth of Plaintiffs' Exhibits 12 through 18. The Court may take judicial notice of facts that "can be accurately and readily determined from sources whose accuracy

cannot reasonably be questioned." Fed. R. Evid. 201(b)(2). Under Federal Rule of Evidence 201(c)(2), the Court "must take judicial notice if a party requests it and the court is supplied with the necessary information." It is well settled that agency reports and publicly available information posted to official agency websites are proper subjects of judicial notice. *See Campaign Legal Ctr. v. Fed. Election Comm'n*, 245 F. Supp. 3d 119, 124 (D.D.C. 2017) (taking notice of publicly available Federal Election Commission documents); *Pharm. Research & Mfrs. of Am. v. Dep't of Health & Human Servs.*, 43 F.Supp.3d 28, 33 (D.D.C. 2014) (noting that court may take judicial notice of information posted on official public websites of government agencies); *Patel v. Shinseki*, 930 F. Supp. 2d 116, 121 n.8 (D.D.C. 2013) (taking judicial notice of government documents at summary judgment stage of proceedings). That courts can take judicial notice only of the existence of court filings in other cases, rather than the truth of the matters asserted therein, is a "common-sense limitation," *Hurd v. District of Columbia*, 864 F.3d 671, 686 (D.C. Cir. 2017), on the Court's general power to take judicial notice of facts contained in accurate sources. *See* Fed. R. Evid. 201(b).

Prosecutions Under the Computer Fraud and Abuse Act's Access Provision

Para. 1: Courts and federal prosecutors have interpreted the Computer Fraud and Abuse Act's ("CFAA") prohibition on "exceed[ing] authorized access," 18 U.S.C. § 1030(a)(2)(C) (the "Access Provision"), to make it a crime to visit a website in a manner that violates the terms of service or terms of use (hereinafter "terms of service" or "ToS") established by that website. Deposition Transcript of John T. Lynch, Jr. ("Lynch Depo.") at 109–13 (Pl. Ex. 4); Off. of Legal Educ., Exec. Off. for United States Att'ys, Dep't of Justice, Prosecuting Computer Crimes, http://www.justice.gov/criminal/cybercrime/docs/ccmanual.pdf at 8–9 (Pl. Ex. 5).

DEF. RESPONSE: Disputed, because not all violations of ToS constitute "exceed[ing] authorized access" under the Access Provision. *See* MTD Op. at 34; Lynch Depo. Tr. at 45–49. Defendant further objects to reliance on the "Prosecuting Computer Crimes" manual, which does not govern how or when any Department of Justice prosecutor can or should bring charges; expressly states that "it "do[es] not represent the official position of the Department of Justice or any other agency"; and is not currently kept up-to-date. *See* Def.'s Resp. to Pls.' Interrog. No. 1.

PL. REPLY: No genuine issue of fact. To the extent Defendant raises a dispute about *which* violations of ToS constitute violations of the Access Provision, this is a question of law. *See* MTD Op., ECF No. 24, at 24–33.

Paras. 2–8: Undisputed.

Para. 9: Federal prosecutors, whether in the United States' Attorneys' Offices throughout the country or in Main Justice, are not required to consult with CCIPS about investigations into possible violations of the Access Provision until the point at which prosecutors seek charges via complaint, information, or indictment under the Access Provision. Lynch Depo. at 100, 120–23.

DEF. RESPONSE: Disputed, because under the Attorney General's *Intake and Charging Policy*, a charging consultation is expected to occur *before* a prosecutor seeks charges. *See* Lynch Depo. Tr. at 123. Additionally, although a consultation under the *Intake and Charging Policy* is not required until a potential charging decision, the Justice Manual also imposes certain consultation requirements prior to that point, which the *Intake and Charging Policy* makes clear are still in effect. *See Intake and Charging Policy*, ECF No. 15-1 at 5 ("USAM 9-50.000 sets forth general

requirements for cyber prosecutions, including coordination with and notification of the Computer Crime and Intellectual Property Section ('CCIPS') of the Criminal Division in certain cases. These provisions are still in effect.").

PL. REPLY: No genuine dispute as to whether federal prosecutors "are required" to consult with CCIPS prior to seeking charges. *See* Lynch Depo. at 100, 123–24 (Pl. Ex. 4, ECF No. 48-4) ("I am aware of the circumstances in which—the policy where we found that the policy did not—was not followed in a particular case . . . ." and "there may be people who are outside that [CHIPS] community who may just not be aware that this policy exists and err by not—by not consulting beforehand"). No genuine dispute to the extent the relied-upon documents contradict deposition testimony.

Para. 10: Charges under the Access Provision for a website term of service violation may result in a plea agreement where a defendant admits to such a violation. Lynch Depo. at 93–94.

DEF. RESPONSE: Disputed, because a "website term of service violation" is not itself sufficient to give rise to criminal liability under the Access Provision. That statute has multiple elements that must be satisfied before criminal liability exists, and "access[ing] a computer without authorization or exceed[ing] authorized access" is only one such element. Moreover, not every terms of service (ToS) violation is by itself sufficient to satisfy the element of "access[ing] a computer without authorization or exceed[ing] authorized access." *See* Def.'s Resp. to Pls.' Interrog. No. 3; MTD Op. at 34; Lynch Depo. Tr. at 45–49. Additionally, the cited deposition testimony only discusses charging instruments that may result in a plea agreement—not charges under the Access Provision that may result in plea agreements.

PL. REPLY: No genuine issue of fact. To the extent Defendant raises a dispute about

which violations of ToS constitute violations of the Access Provision, this is a question of law. *See* MTD Op., ECF No. 24, at 24–33. The cited deposition testimony speaks for itself.

Para. 11: Main Justice does not have a record of each and every instance where prosecution under the Access Provision for a website term of service violation has been investigated, even since the adoption of recordkeeping requirements in 2014. Lynch Depo. at 122–23, 132–34.

DEF. RESPONSE: Disputed, because the cited deposition testimony only discusses CCIPS' records of consultations under the Attorney General's *Intake and Charging Policy*, not recordkeeping practices of every component of the Department of Justice located in Washington, D.C. Defendant is also unclear as to the meaning of the phrase "every instance where prosecution . . . has been investigated[.]"

PL. REPLY: No record dispute. The cited deposition testimony speaks for itself.

Para. 12: Main Justice does not have a record of each and every instance where prosecution under the Access Provision for a website term of service violation has resulted in charges in a complaint, information, or indictment. Lynch Depo. at 132–34.

DEF. RESPONSE: Disputed, because the cited deposition testimony only discusses CCIPS' records of consultations under the Attorney General's *Intake and Charging Policy*, not recordkeeping practices of every component of the Department of Justice located in Washington, D.C. Moreover, with respect to charges brought under the Access Provision since June 29, 2015—the time period identified by Plaintiffs as relevant—DOJ has determined that no charges have been filed (whether by indictment, information, or complaint) in which the element of "access[ing] a

computer without authorization or exceed[ing] authorized access" was satisfied, in whole or in part, based on violation of a website's or platform's ToS. *See* Def.'s Resps. to Pls.' Interrog. No. 4; Lynch Depo. Tr. at 137–40; Suppl. Lynch Decl. ¶ 10.

PL. REPLY: No genuine issue of fact. The Department of Justice's determination regarding charges brought since June 29, 2015, which occurred after the DOJ's 30(b)(6) deposition, *see* Suppl. Lynch Dec. ¶ 10 (Def. Ex. 9, ECF No. 53-9), is based on a review of records held by Main Justice that are not "fully comprehensive," *see id.* at ¶¶ 5–6, or not based on personal knowledge of the relevant records, *see id.* at ¶¶ 7–9 (declarant testifying that "[a]fter discussion with representatives of [the Executive Office of United States Attorneys ("EOUSA")], my understanding is that an important role of EOUSA is to maintain a centralized computer database" and that testimony regarding the accuracy and reliability of the EOUSA database is based on such "discussion" and "understanding").

Para. 13: Main Justice may not be made aware of every single plea agreement that prosecutors have obtained by using the Access Provision, including those in which defendants admitted to harmless terms of service violations. Lynch Depo. at 146; *see also id.* at 120–25, 128–29, 132–34.

DEF. RESPONSE: Disputed, because Defendant is not clear as to the meaning of the phrase "Main Justice may not be made aware of[.]" The cited deposition testimony discusses CCIPS' consultations under the Attorney General's *Intake and Charging Policy*, not abstract "awareness" by every component of the Department of Justice located in Washington, D.C. Additionally, DOJ has determined that, since at least June 29, 2015, the Access Provision has not been used to obtain plea agreements

based on website or platform ToS violations (harmless or otherwise). *See* Def.'s Resps. to Pls.' Interrog. No. 4; Lynch Depo. Tr. at 137–40; Suppl. Lynch Decl. ¶ 10.

PL. REPLY: The cited deposition testimony speaks for itself. For Plaintiffs' reply to the Department of Justice's determination regarding charges brought since June 29, 2015, *see supra* Plaintiffs' reply to paragraph 12.

Para. 14: Undisputed.

Para. 15: The United States Attorneys' Offices do not always inform CCIPS of instances in which they bring charges in a complaint, information, or indictment under the Access Provision for a website term of service violation. Lynch Depo. at 123–25, 132–34.

DEF. RESPONSE: Disputed, because the cited deposition testimony only addresses whether there have been situations in which charging consultations under the *Intake and Charging Policy* did not occur prior to a charging decision. Additionally, the fact that a small number of those situations occurred in the past, *see* Suppl. Lynch Decl. ¶ 6, does not establish that such situations will continue in the future, as Plaintiffs' phrasing suggests. To the contrary, CCIPS actively tries to minimize such situations. *See* Lynch Depo. Tr. at 100, 124–25.

PL. REPLY: No genuine issue of fact that CCIPS is not always informed, especially in light of the fact that CCIPS "actively tries to minimize such situations" which confirms that such situations can occur. The cited deposition testimony speaks for itself.

Para. 16: The United States Attorneys' Offices do not always inform CCIPS of instances in which a defendant, as part of a plea agreement, admits to a violation of the Access Provision for a website term of service violation. Lynch Depo. at 123–24, 128–29, 132–34, 146.

DEF. RESPONSE: Disputed, because the cited deposition testimony only addresses

whether there have been situations in which charging consultations under the *Intake and Charging Policy* did not occur prior to a charging decision. Additionally, the fact that a small number of those situations occurred in the past, *see* Suppl. Lynch Decl. ¶ 6, does not establish that such situations will continue in the future, as Plaintiffs' phrasing suggests.

PL. REPLY: No genuine issue of fact. The cited deposition testimony speaks for itself.

Paras. 17–18: Undisputed.

Para. 19: The Department of Justice's current Intake and Charging Policy for Computer Crime Matters does not foreclose federal prosecutors from seeking charges under the Access Provision for violations of website terms of service. Lynch Depo. at 143–44, 152–53 (referring to Lynch Affidavit at ¶ 9).

DEF. RESPONSE: Disputed, because "violations of website terms of service" is not itself sufficient to give rise to criminal liability under the Access Provision. That statute has multiple elements that must be satisfied before criminal liability exists, and "access[ing] a computer without authorization or exceed[ing] authorized access" is only one such element. Moreover, not every terms of service (ToS) violation is by itself sufficient to satisfy the element of "access[ing] a computer without authorization or exceed[ing] authorized access." *See* Def.'s Resp. to Pls.' Interrog. No. 3; MTD Op. at 34; Lynch Depo. Tr. at 45–49.

PL. REPLY: No genuine issue of fact. To the extent Defendant raises a dispute about *which* violations of ToS constitute violations of the Access Provision, this is a question of law. *See* MTD Op., ECF No. 24, at 24–33.

Para. 20: John T. Lynch, Jr., the Chief of the Computer Crime and Intellectual Property

Section of the Criminal Division of the U.S. Department of Justice, does not believe that it is impossible that the Department of Justice would bring a prosecution for the terms of service violations that Plaintiffs intend to commit where those violations result in de minimis harm. Lynch Depo. at 149–54.

DEF. RESPONSE: Disputed, because Defendant is unclear as to the meaning of the phrase "impossible that the Department of Justice would bring a prosecution[.]" Mr. Lynch testified in his personal capacity that it is not "impossible *for* the Department to bring a CFAA prosecution based on such facts and de minimis harm," Lynch Depo. Tr. 154 (emphasis added), which addresses the Department's *ability* to prosecute, not the *probability* of a prosecution as Plaintiffs' phrasing suggests. On the topic of probability, Mr. Lynch "do[es] not expect that the Department would bring a CFAA prosecution based on such facts and de minimis harm." Lynch Aff. (ECF No. 21-1) ¶ 9.

PL. REPLY: No genuine issue of fact. The cited deposition testimony speaks for itself.

Para. 21: The Department of Justice does not consider that harmless terms of service violations mean that literally no harm arises out of the violation. Lynch Depo. at 40–41.

DEF. RESPONSE: Disputed, because sometimes the Department may use the word "harmless" to mean no harm. *See* Lynch Depo. Tr. at 152 (distinguishing between "harmless" and "*de minimis* harm," stating that "harmless is . . . none"). Additionally, prior to the passage cited on pages 40–41, Plaintiffs' counsel implied that the question was "ask[ing] what the Department of Justice considers harmless *or trivial* violations of use restrictions or Web site terms of service." Lynch Depo. Tr. at 39 (emphasis added).

PL. REPLY: No genuine issue of fact simply because "sometimes" DOJ may use the word "harmless" to mean no harm. Sometimes, the Department may use the word "harmless" even when there is *some* harm. *See* Lynch Depo. at 39–41 (Pl. Ex. 4, ECF No. 48-4). In response to the question "Can you describe harmless violations of use restrictions?" the testimony was of an example where "the relative loss to the employer is minimal," such as "some loss of employee ti me or, you know, use of resources." *Id.* at 40. The cited deposition testimony speaks for itself.

Para. 22: The Department of Justice considers harmless violations of the Access Provision to include situations where an employee violates an employer use policy, resulting in some loss of employee time or use of resources, but no significant monetary loss for the employer and no significant jeopardy for the employer's computer systems or networks. Lynch Depo. at 40–43.

DEF. RESPONSE: Disputed, because prior to the passage cited on pages 40–41, Plaintiffs' counsel implied that the question was "ask[ing] what the Department of Justice considers harmless *or trivial* violations of use restrictions or Web site terms of service." Lynch Depo. Tr. at 39 (emphasis added). Additionally, those examples would not necessarily constitute violations of the Access Provision; not every violation of a use policy is by itself sufficient to satisfy the element of "access[ing] a computer without authorization or exceed[ing] authorized access." *See* Def.'s Resp. to Pls.' Interrog. No. 3; MTD Op. at 34; Lynch Depo. Tr. at 45–49.

PL. REPLY: No genuine issue of fact. The cited deposition testimony speaks for itself. *See also supra* Plaintiffs' reply to paragraph 21. To the extent Defendant raises a dispute about *which* violations of ToS constitute violations of the Access Provision, this is a

question of law. *See* MTD Op., ECF No. 24, at 24–33.

Para. 23: The Department of Justice considers relatively minor terms of service violations to include some situations where someone lies on a website and causes third-party users of a website to be upset with a website for not presenting accurate profiles of individuals or where third-party users may choose not to use a website anymore. Lynch Depo. at 48–50.

DEF. RESPONSE: Disputed, because the cited testimony is not about websites generally, but is limited to a hypothetical dating website that had "relatively lax restrictions on providing false information" and "a tolerance by the company . . . for a certain amount of false information." Lynch Depo. Tr. at 46, 48–49; *see also id.* at 46–50.

PL. REPLY: No genuine issue of fact that a hypothetical dating website constitutes "some situation[]" in which terms of service violations are considered relatively minor by the Department of Justice. The cited deposition testimony speaks for itself.

Para. 24: The Department of Justice considers that there are some websites that have terms of service restrictions prohibiting providing false information where a violation of such a term of service might be trivial. Lynch Depo. at 45–46.

DEF. RESPONSE: Disputed, because the cited testimony is not about websites that have complete prohibitions on providing any false information, but is instead about websites that have "relatively lax restrictions on providing false information." Lynch Depo. Tr. at 46.

PL. REPLY: No genuine issue of fact. There is no legal basis under the Access Provision for identifying "relatively lax restrictions on providing false information" and, to the extent Defendant argues there is one, any such distinction is a question of

law. There is no factual dispute that websites that have "relatively lax restrictions on providing false information"—however defined—constitute "some websites" as stated in paragraph 24 of Plaintiffs' Statement of Undisputed Material Facts. The cited deposition testimony speaks for itself.

Para. 25: The Department of Justice has no interest in prosecuting harmless terms of service violations under the Access Provision. Lynch Depo. at 38–39.

DEF. RESPONSE: Undisputed to the extent it is referring to the Department's intent to prosecute; but disputed to the extent this statement is a characterization of the governmental interests underlying the Access Provision itself. *See* Lynch Depo. Tr. at 38 ("It is not a statement relating to the scope of the crime. It is a statement regarding our interests in prosecution of those – of certain sorts of Computer Fraud and Abuse Act violations."); *see also* Def.'s Suppl. Resps. to Pls.' Interrogs. Nos. 6, 7.

PL. REPLY: The cited deposition testimony regarding "interests" speaks for itself.

Offline Discrimination Testing

Paras. 23–31: Undisputed.

Para. 32: According to HUD's study of housing discrimination published in 2013, HUD applied a paired-testing methodology in twenty-eight metropolitan areas and found that Black, Latino, and Asian testers were told about and shown fewer homes than white testers. U.S. Dep't of Housing and Urban Dev., Off. of Policy Dev. and Research, Housing Discrimination Against Racial and Ethnic Minorities 2012 (June 2013), at xi, xii,

DEF. RESPONSE: Disputed because HUD did not itself conduct the study; the study was conducted by individuals affiliated with a non-governmental organization. *See* Pls.' Exh. 15 at PID0969.

PL. REPLY: No genuine issue of fact. The study was prepared for and published by the U.S. Department of Housing and Urban Development ("HUD"), and the document speaks for itself on these points.

Para. 33: Undisputed.

Para. 34: HUD has stated that researchers and/or testers in paired testing studies provide false information to the target of the testing. HUD 2012 Study, at 3 (stating that paired testing may "deceive[]" research subjects); U.S. Dep't of Housing and Urban Dev., An Estimate of Housing Discrimination Against Same-Sex Couples (June 2013), at 9, https://www.huduser.gov/portal/Publications/pdf/Hsg_Disc_against_SameSexCpls_v3.pdf (hereinafter "HUD Same-Sex Couples Report") (Pl. Ex. 16) ("First names and e-mail accounts were created for the e-mails from prospective gay male, lesbian, and heterosexual renters. In addition, names were created for partners of the gay male and lesbian renters and for spouses of the heterosexual renters.").

DEF. RESPONSE: Disputed because HUD did not itself make any statements in the cited studies; both studies were conducted by individuals affiliated with a non-governmental organization. *See* Pls.' Exh. 15 at PID0969; Pls.' Exh. 16 at PID1159. Additionally, neither cited study supports Plaintiffs' statement implying that paired testing necessarily requires the provision of false information.

PL. REPLY: No genuine issue of fact. The study was prepared for and published by HUD, and the document speaks for itself on these points.

Para. 35: Undisputed.

Para. 36: HUD has stated that as part of studies it has sponsored, false information provided to the target of a housing discrimination test can include the fact that the tester is seeking a home

when the tester is not, in fact, seeking a home. HUD Same-Sex Couples Report, at 2 (stating that testers "pose as individuals seeking housing"); HUD 2012 Study, at 4 (noting that testing methodology imposes costs of "interacting with a fictitious customer" and "may invade the privacy rights of the person or office being tested").

DEF. RESPONSE: Disputed because HUD did not itself make any statements in the cited studies; both studies were conducted by individuals affiliated with a non-governmental organization. *See* Pls.' Exh. 16 at PID1159; Pls.' Exh. 15 at PID0969.

PL. REPLY: No genuine issue of fact. The studies were prepared for and published by HUD, and the documents speak for themselves on these points.

Para. 37: Undisputed.

Para. 38: HUD has stated that as part of studies it has sponsored, false information provided to the target of a housing discrimination test may include the qualifications of the tester to receive the home they are applying for. HUD 2012 Study, at 5 ("Minority and white testers . . . were assigned income, assets, and debt levels to make both testers unambiguously well qualified for the representative sample of advertised units and to make the minority tester slightly better qualified.").

DEF. RESPONSE: Disputed because HUD did not itself make any statements in the cited studies; both studies were conducted by individuals affiliated with a non-governmental organization. *See* Pls.' Exh. 15 at PID0969.

PL. REPLY: No genuine issue of fact. The study was prepared for and published by HUD, and the document speaks for itself on these points.

Para. 39: The EEOC has stated that false information provided to the target of an employment discrimination test may include the qualifications of the tester to receive the job they are

applying for. EEOC 1996 Notice, at 1 ("Testers are matched to appear equally qualified with respect to their employment histories, educational backgrounds, references, and other relevant factors.").

DEF. RESPONSE: Disputed because the cited statement is ambiguous as to whether any of the qualifications involve false information.

PL. REPLY: No genuine issue of fact. The cited statement by the EEOC speaks for itself.

Online Discrimination Testing

Paras. 40–53: Undisputed.

Para. 54: Certain persons and groups have raised concerns that analytics could enable intentional or unintentional discrimination based on protected class status under civil rights laws. Answer, ECF No. 26, at ¶ 6 (referring to Complaint, ECF No. 1, at ¶ 6).

DEF. RESPONSE: Disputed because the cited admission in Defendant's Answer does not mention civil rights laws.

PL. REPLY: No genuine issue of fact. The Defendant's Answer speaks for itself, and states: "Defendant admits only that certain persons and groups have raised concerns that analytics could enable intentional or unintentional discrimination based on membership in a protected class." Answer at ¶ 6 (Pl. Ex. 6, ECF No. 48-6).

Paras. 55–57: Undisputed.

Para. 58: Outcomes-based audit testing enables researchers to compare the content that is shown to different users online. Wilson Dec. at ¶ 7; Mislove Dec. at ¶ 7. Other types of outcomes-based audit testing may compare the decisions reached about website or platform users. Mislove Dec. at ¶ 7.

DEF. RESPONSE: Undisputed as to the first sentence, but disputed as to the second sentence because Defendant is not clear what it means to "compare the decisions reached about website or platform users.

PL. REPLY: No record dispute.

Para. 59: Outcomes-based audit testing is a way to determine whether users are experiencing discrimination in transactions covered by civil rights laws on the basis of their protected class status. Wilson Dec. at ¶ 8; Mislove Dec. at ¶ 8.

DEF. RESPONSE: Disputed because this statement is not a fact but rather a legal conclusion about what types of evidence are sufficient to prove discrimination under civil rights laws. Moreover, Plaintiffs lack a valid foundation for them to opine on such legal concepts. *See* Mislove Depo. Tr. at 153–54; Wilson Depo. Tr. at 125, 144.

PL. REPLY: No genuine dispute. Plaintiffs' testimony speaks for itself, and does not refer to questions of legal liability, but to what outcomes-based audit testing aims to study: transactions covered by civil rights laws (such as housing, employment, and credit) and discrimination (i.e. differential treatment) based on protected class status (such as race or gender).

Para. 60: Without outcomes-based audit testing of certain online websites there may be no way to determine whether discrimination based on protected class status is occurring. Wilson Dec. at ¶ 9; Mislove Dec. at ¶ 9.

DEF. RESPONSE: Disputed because this statement is speculative on its face—stating only that something "may" be true—and thus the statement should be disregarded. Defendant is not capable of meaningfully responding to a speculative statement of this nature. Moreover, Plaintiffs lack a valid foundation to opine on the various

methods of testing discrimination. *See* Wilson Depo. Tr. at 144 ("I'm not steeped in the discrimination literature the way, like, a humanities person would"), Mislove Depo. Tr. at 88 (stating that he is familiar with offline audit studies only "[a]t a general level" but "I'm not familiar with specific studies").

PL. REPLY: No record dispute. Plaintiffs' testimony refers to *online websites* and therefore Plaintiff Mislove's testimony regarding his familiarity with *offline* audit studies is not relevant. Plaintiff Mislove and Plaintiff Wilson are competent to opine on outcomes-based audit testing of online websites, as they are university computer science professors who have conducted such studies in the past. *See* Def. Statement of Material Facts Not In Dispute, ECF No. 51-1 ("D-SMF"), at ¶¶ 1-3.

Plaintiffs' Research Plan

Para. 61: Plaintiffs are academics who intend to access or visit certain online hiring websites for purposes of conducting academic research regarding potential online discrimination. Wilson Dec. at ¶¶ 1, 10; Mislove Dec. at ¶¶ 1, 10.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 62: Plaintiffs intend to study algorithmic discrimination in the employment context.

They have designed and intend to conduct a study that would determine whether the algorithms used by some hiring websites produce results that discriminate against job seekers by race, gender, or other characteristics. Wilson Dec. at ¶ 11; Mislove Dec. at ¶ 11. This study is referred to by the Plaintiffs as their "research plan." Id.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 63: Plaintiffs' research plan involves studying online hiring websites that advertise employment opportunities, allow users to apply for employment opportunities, or allow employers or recruiters to view potential job candidates. Wilson Dec. at ¶ 12; Mislove Dec. at ¶ 12.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48

(corresponding to D-SMF § I.C).

Para. 64: Plaintiffs' research plan involves audit testing and related investigative work to determine whether online hiring websites' algorithms treat users differently based on characteristics, such as race or gender, that constitute a protected class status under civil rights laws. Wilson Dec. at ¶ 13; Mislove Dec. at ¶ 13. Such differential treatment on the basis of protected class status is referred to by Plaintiffs as "online discrimination." Id.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Paras. 65–67: Undisputed.

Para. 68: Plaintiffs seek to determine whether the ranking algorithms on online hiring websites produce discriminatory outputs by systematically ranking specific classes of people (e.g., people of color or women) below others. This could happen intentionally or inadvertently. Wilson Dec. at ¶ 17; Mislove Dec. at ¶ 17.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, although it is theoretically possible for a website to discriminate intentionally, Plaintiffs do not believe that online websites are

discriminating intentionally. *See* Wilson Depo. Tr. at 33–34, 73–77; Mislove Depo. Tr. at 42–43, 63–65, 185–86.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C). Additionally, the cited deposition testimony by Plaintiffs Mislove and Wilson does not contradict their statements that discriminatory outputs on online hiring websites "could happen intentionally." Plaintiffs Mislove and Wilson testified as to their opinion regarding the likelihood of intentional discrimination by websites they had previously studied. *See* Wilson Depo. at 33–34, 73–77 (Def. Ex. 4, ECF No. 53-4); Mislove Depo. at 42–43, 63–65, 185–86 (Def. Ex. 3, ECF No. 53-3).

Para. 69: Plaintiffs' research plan will be an audit study that will test the hypothesis that hiring websites may produce discriminatory outputs by relying on data that includes real-world biases. For example, a hiring website could rank job candidates in search results in a racially disparate manner if the algorithm that determines which results are displayed takes into account factors—gleaned from a user's resume, browsing history, or social networking profiles—that correlate with race. Wilson Dec. at ¶ 18; Mislove Dec. at ¶ 18.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and

deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 70: On each hiring website, Plaintiffs will investigate whether there are correlations between the rank ordering of job candidates in search results and race, gender, or age. If they observe that candidates with specific attributes are consistently ranked lower (when controlling for other confounding variables), this may indicate that the algorithm is discriminatory. Wilson Dec. at ¶ 19; Mislove Dec. at ¶ 19.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Moreover, the second sentence is speculative on its face—stating only that something "may" be true—and thus the sentence should be disregarded. Defendant is not capable of meaningfully responding to a speculative statement of this nature. The statement also fails to provide sufficient detail about any hypothetical study to enable Defendant to evaluate whether Plaintiffs may properly conclude that the algorithm itself is discriminatory, as opposed to merely reflecting problems in the underlying data source. *See* P-SMF ¶¶ 52–53.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C). Additionally, the second sentence reflects a

hypothesis that Plaintiffs intend to test, and therefore it is nonsensical to suggest it should be disregarded as speculative.

Para. 71: To investigate online discrimination in the employment context online, Plaintiffs will create profiles for fictitious job seekers, post fictitious job opportunities, and compare their fictitious users' rankings in a list of candidates for the fictitious jobs. The goal of this audit study is to examine how the websites rank the fictitious candidates for their fictitious jobs, and whether such ranking is influenced by race, gender, age, or other attributes. Wilson Dec. at ¶ 20; Mislove Dec. at ¶ 20.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 72: Plaintiffs plan to create tester accounts reflecting fictitious users with varying attributes (e.g., race, gender, age). These accounts will always include one uniform, globally unique attribute (e.g., attendance at a fictitious high school) so that Plaintiffs can search for the fictitious users as distinct from genuine jobseekers. These tester accounts will then be used to search for fictitious jobs that Plaintiffs will post on the websites. Wilson Dec. at ¶ 21; Mislove Dec. at ¶ 21.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to

conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 73: Plaintiffs will systematically conduct searches as the employers of the fictitious jobs they have posted (in other words, using tester employer accounts they have created), using the same keywords that were tested earlier, with the addition of a filter corresponding to the uniform attribute (e.g., the fictitious high school). This will ensure that the search results contain only the fictitious users. Wilson Dec. at ¶ 22; Mislove Dec. at ¶ 22.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48

(corresponding to D-SMF § I.C).

Para. 74: By comparing the rankings of fictitious users with certain attributes to those without those attributes, Plaintiffs will be able to examine how specific user attributes such as race impact search rank. Wilson Dec. at ¶ 23; Mislove Dec. at ¶ 23.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 75: Plaintiffs have designed their research plan to minimize any harm by limiting the number of concurrent tests that they run and deleting the job listings and job seeker accounts when they are done. Wilson Dec. at ¶ 24; Mislove Dec. at ¶ 24.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs lack a valid foundation for determining whether their studies pose harm to companies. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs designing their research plan to minimize harm by taking certain measures. Whether or not such measures are objectively reasonable methods of minimizing legally cognizable harm is a legal conclusion. To the extent Defendant is objecting to the question of whether any study actually causes material harm, such a determination is by necessity a post-hoc one.

Para. 76: Plaintiffs have designed their research plan to minimize any effect on the target websites' operations by creating or using the minimum number of accounts necessary to conduct the study, including minimizing false accounts, and by avoiding sending too many service requests to a website or platform. Wilson Dec. at ¶ 25; Mislove Dec. at ¶ 25.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs lack a valid foundation for determining whether their studies pose harm to companies. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute,

responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs designing their research plan to minimize harm by taking certain measures. Whether or not such measures are objectively reasonable methods of minimizing legally cognizable harm is a legal conclusion. To the extent Defendant is objecting to the question of whether any study actually causes material harm, such a determination is by necessity a post-hoc one.

Para. 77: When Plaintiffs conduct an online study, they will typically rate limit their requests to a website to one every 10 to 30 seconds, to minimize any load on the website's servers. Wilson Dec. at ¶ 26; Mislove Dec. at ¶ 26.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs lack a valid foundation for determining whether their studies pose harm to companies. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs designing their research plan to minimize harm by taking certain measures. Whether or not such measures are

objectively reasonable methods of minimizing legally cognizable harm is a legal conclusion. To the extent Defendant is objecting to the question of whether any study actually causes material harm, such a determination is by necessity a post-hoc one.

Para. 78: Plaintiffs have designed their research plan to minimize any harm to third-party users of the websites by, among other things, making sure that real job seekers are unlikely to find, and discouraged from applying to, the fictitious jobs. Plaintiffs will also take steps to ensure their fictitious job seeker accounts are unlikely to appear in search results for real recruiters' reasonable search queries. Wilson Dec. at ¶ 27; Mislove Dec. at ¶ 27. For example, one method of discouraging interactions with real users is to state in any fictitious job posting, or in any fictitious job seeker profile, that the job or the job seeker is not real. Mislove Dec. at ¶ 27.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs have not established a valid foundation for determining whether their studies pose harm to third-party users. *See also* Wilson Depo. Tr. at 166–67 (Plaintiffs do not necessarily know the impact of their actions on third-party users).

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48

(corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs designing their research plan to minimize harm by taking certain measures. Whether or not such measures are objectively reasonable methods of minimizing legally cognizable harm is a legal conclusion. To the extent Defendant is objecting to the question of whether any study actually causes material harm, such a determination is by necessity a post-hoc one.

Para. 79: Plaintiffs intend to bring the results of this research to the public and to publish their findings in academic or conference papers. Wilson Dec. at ¶ 28; see Mislove Dec. at ¶ 28.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 80: Undisputed.

Para. 81: Plaintiffs' research plan requires providing false information to the websites they study, including by making fictitious job postings. Wilson Dec. at ¶ 30; Mislove Dec. at ¶ 30.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully

evaluate the accuracy of this statement. Moreover, Plaintiffs have alternatives available to them for conducting potential research into online discrimination. *See* D-SMF § V.E.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 116–135 (corresponding to D-SMF § V.E).

Para. 82: Plaintiffs' research plan requires creating tester accounts using false or misleading information on the websites they study. Wilson Dec. at ¶ 31; Mislove Dec. at ¶ 31.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs have alternatives available to them for conducting potential research into online discrimination. *See* D-SMF § V.E.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 116–135 (corresponding to D-SMF

§ V.E).

Para. 83: Creating tester accounts sometimes requires providing false information. Creating tester accounts sometimes does not require providing false information but may nonetheless constitute providing misleading information when it is in violation of website terms of service that require that anyone creating an account be a job seeker or an employer or be using the website only for the purpose of finding a job or recruiting candidates for a job. Wilson Dec. at ¶ 32; Mislove Dec. at ¶ 32.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms or terms of service), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs have alternatives available to them for conducting potential research into online discrimination. *See* D-SMF § V.E.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 116–135 (corresponding to D-SMF § V.E).

Para. 84: The methodology Plaintiffs intend to use in their research plan is standard within their research community as a means of audit testing for discrimination. Wilson Dec. at ¶ 33; Mislove Dec. at ¶ 33.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms or terms of service), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, the computer science field does not have consistent standards governing what constitutes ethical research. *See* Wilson Depo. Tr. at 18 (stating that ethics guidelines "are highly variable and they are changing rapidly" and "I would say that computer science does not have a great track record as a discipline in this regard"); *id.* at 78 ("There are some members of the community who believe that a terms of service is an ethical violation."); Mislove Depo. Tr. at 21–22, 36, 67 (similar).

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 116–135 (corresponding to D-SMF § V.E). Plaintiffs' statement refers to "methodology" that is "standard within their research community" which is not inconsistent with the deposition testimony cited by Defendants regarding variable approaches to ethics.

Para. 85: Plaintiffs' research plan requires providing false information to websites about the qualifications of fictitious job applicants in order to isolate the effect of the characteristic being studied, such as race or gender. Wilson Dec. at ¶ 34; Mislove Dec. at ¶ 34. No adequate alternative exists where research seeks to isolate the impact of a single such characteristic. *Id.*

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms or terms of service), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs have alternatives available to them for conducting potential research into online discrimination. *See* D-SMF § V.E.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 116–135 (corresponding to D-SMF § V.E).

Para. 86: Plaintiffs are aware that their research plan will violate target websites' terms of service prohibiting providing false information and/or creating accounts using false information. Wilson Dec. at ¶ 35; Mislove Dec. at ¶ 35.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms or terms of service), Defendant cannot meaningfully evaluate the accuracy of this statement.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth

in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 87: Undisputed.

Para. 88: Seeking permission from a target website prior to conducting an audit test for discrimination would affect the scientific validity of such research. Wilson Dec. at ¶ 37; Mislove Dec. at ¶ 37.

DEF. RESPONSE: Disputed. To the extent Plaintiffs are referring to their research plan, Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because Plaintiffs' study has not yet been fully designed (nor does this particular statement describe any potential "audit test"), Defendant cannot meaningfully evaluate the accuracy of this statement. In any event, Defendant disputes that requesting permission necessarily renders an audit scientifically invalid – especially with respect to Plaintiffs, who have already made public statements about potential future work; who do not believe that companies are intentionally discriminating; who have never been directed by employment companies not to conduct audits in the future; and whom employment websites are already generally aware of. *See* D-SMF § V.E.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48

(corresponding to D-SMF § I.C). With respect to the final sentence of Defendant's response, Defendant offers no record evidence to dispute Plaintiffs' statement that seeking permission "would affect the scientific validity" of an audit, and at most offers argumentation about the separate question of whether requesting permission "*necessarily*" renders an audit "scientifically *invalid*." *See* Pl. Resp. to Def. Statement of Material Facts Not In Dispute, responding to paragraphs 116–135 (corresponding to D-SMF § V.E).

Para. 89: Once a company knows it is going to be audited or tested for potential discrimination, it can change its behavior for the time period of the test or research in a way that could affect the test or research findings. Wilson Dec. at ¶ 38; Mislove Dec. at ¶ 38.

DEF. RESPONSE: Undisputed as a general or theoretical matter, but disputed that any of the online employment platforms that Plaintiffs hypothetically may study would respond in this manner. Plaintiffs have admitted that they can only speculate as to how an online employment company would respond to a request for permission to conduct an audit. *See* Mislove Depo. Tr. at 114–15; Wilson Depo. Tr. at 111–12. Moreover, the fact that Plaintiffs do not believe the companies are intentionally discriminating, and the fact that many of the companies have previously been willing to work with academics to allow studies using the companies' data, demonstrate that the companies are highly unlikely to respond to an audit in such a manner. *See* Wilson Depo. Tr. at 33–34, 73–77; Mislove Depo. Tr. at 42–43, 63–65, 185–86; *see also* LinkedIn Decl. (Def.'s Exh. 11) ¶¶ 32–35; Glassdoor Decl. (Def.'s Exh. 13) ¶¶ 23–27; Facebook Decl. (Def.'s Exh. 12) ¶ 19.

PL. REPLY: No genuine issue of fact. Defendant mischaracterizes Plaintiffs'

testimony in writing that "Plaintiffs do not believe the companies are intentionally discriminating." Plaintiffs Mislove and Wilson testified as to their opinion regarding the likelihood of intentional discrimination by websites they had previously studied. *See* Wilson Depo. at 33–34, 73–77 (Def. Ex. 4, ECF No. 53-4); Mislove Depo. at 42–43, 63–65, 185–86 (Def. Ex. 3, ECF No. 53-3). The cited deposition testimony by Plaintiffs Mislove and Wilson does not contradict their statements in their declarations that discriminatory outputs on online hiring websites "could happen intentionally." *See* Wilson Dec. at ¶ 17 (Pl. Ex. 1, ECF No. 48-1); Mislove Dec. at ¶ 17 (Pl. Ex. 2, ECF No. 48-2).

Para. 90: The results of audit testing or academic research into online discrimination could expose a website to potential liability or embarrassment, and could require the company to spend money re-engineering its systems as a result. Wilson Dec. at ¶ 39; Mislove Dec. at ¶ 39.

DEF. RESPONSE: Disputed as to "potential liability," as Defendant is not clear as to the meaning of that phrase. Moreover, Plaintiffs lack a valid foundation to opine on such legal concepts. *See* Mislove Depo. Tr. at 153–54; Wilson Depo. Tr. at 125, 144.

PL. REPLY: No genuine issue of fact regarding whether audit testing or academic research into online discrimination could expose a website to embarrassment or require it to spend money re-engineering its systems. To the extent Defendant is arguing that the results of audit testing or academic research might not result in legal liability for a website, that is a question of law and not a dispute of fact.

Para. 91: Plaintiff Christo Wilson described his intention to conduct the proposed research plan in his application for a National Science Foundation ("NSF") CAREER grant, which he submitted in 2015. Wilson Dec. at ¶ 40.

DEF. RESPONSE: Disputed because Plaintiff Wilson specifically testified that he does not have any concrete plans to conduct this research, nor has he fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, Plaintiff Wilson described the CAREER application's description of intended research as "speculative." *See* Wilson Depo. Tr. at 54 ("The bulk of the document is then the research plan itself. What are you going to be doing. Most of that is speculative in the sense that you are proposing new work. That said, you can't just say things that are wild and crazy. You have to provide some justification why it is plausible.").

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiff Wilson's declaration and deposition testimony speaks for itself. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 92: Plaintiff Christo Wilson's CAREER grant application listed certain hiring websites and/or platforms that he and Plaintiff Mislove intend to access in the future for purposes of conducting the research plan, but the list of websites was not exhaustive. Wilson Dec. at ¶ 41.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, Plaintiff Wilson described the CAREER application's description of intended research as "speculative." *See* Wilson Depo. Tr. at 54.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiff Wilson's declaration and deposition testimony speaks for itself. Plaintiffs' objection is more

fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 93: Undisputed.

Para. 94: The platforms and/or websites in the employment or hiring industry change rapidly, and the practicability of auditing them may also vary, such that Plaintiffs cannot now identify all such platforms and/or websites that they will access in the future for purposes of conducting the research plan. Wilson Dec. at ¶ 43; Mislove Dec. at ¶ 40.

DEF. RESPONSE: Undisputed that Plaintiffs have not identified the platforms and/or websites that they will access for potential future research. Disputed that there is any impediment to Plaintiffs doing so—*i.e.*, if they had concrete plans for such research. *Cf.* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute regarding why Plaintiffs cannot identify all such platforms and/or websites that they will access in the future. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 95: Terms of service may be subject to change at any time, without notice to users, and without a record provided to users of what terms of service were operative on each and every visit they made to a website. Wilson Dec. at ¶ 44; Mislove Dec. at ¶ 41.

DEF. RESPONSE: Disputed to the extent that Plaintiffs contend that they are unable to determine what terms of service are operative each time they visit a website. *See,*

e.g., LinkedIn Decl. (Def.'s Exh. 11) ¶¶ 16–18; Glassdoor Decl. (Def.'s Exh. 13) ¶¶ 7, 15; Facebook Decl. (Def.'s Exh. 12) ¶¶ 5–8. Additionally, there is no record that the terms of service relevant here—*i.e.*, pertaining to creation of false or misleading accounts—change frequently.

PL. REPLY: No genuine issue of fact, because Plaintiffs do not contend that they are unable to determine what terms of service are operative each time they visit a website, but rather: "Terms of service may be subject to change at any time, without notice to users, and without a record provided to users of what terms of service were operative on each and every visit they made to a website." Wilson Dec. at ¶ 44 (Pl. Ex. 1, ECF No. 48-1); Mislove Dec. at ¶ 41 (Pl. Ex. 2, ECF No. 48-2).

Para. 96: Undisputed.

Para. 97: Plaintiffs have designed their research plan to have at most a de minimis impact, if any, on the target websites' operations. Wilson Dec. at ¶ 46; Mislove Dec. at ¶ 43.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs lack a valid foundation for determining whether their studies pose harm to companies, and their definition of *de minimis* harm is broader than objectively *de minimis* harm. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to

paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs' design of their research plan. To the extent Defendant is disputing whether any of Plaintiffs' studies actually causes more than de minimis harm, that is a post-hoc determination, and a legal conclusion, not a factual dispute.

Para. 98: Plaintiffs have designed their research plan to have at most a de minimis impact, if any, on third-party users. Wilson Dec. at ¶ 47; Mislove Dec. at ¶ 44.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs have not established a valid foundation for determining whether their studies pose harm to third-party users, and their definition of *de minimis* harm is broader than objectively *de minimis* harm. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs' design of their research plan. To the extent Defendant is disputing whether any of Plaintiffs' studies actually causes more

than de minimis harm, that is a post-hoc determination, and a legal conclusion, not a factual dispute.

Para. 99: Plaintiffs have designed their research plan such that false or misleading speech during the course of creating fictitious accounts or postings will not cause material harm to the target websites' operations because it will have a de minimis impact, if any, on the target websites' operations. Wilson Dec. at ¶ 48; Mislove Dec. at ¶ 45.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. Moreover, Plaintiffs lack a valid foundation for determining whether their studies pose harm to companies, and their definition of *de minimis* harm is broader than objectively *de minimis* harm. *See* D-SMF § V.D.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 109–115 (corresponding to D-SMF § V.D). Additionally, this statement refers to Plaintiffs' design of their research plan. To the extent Defendant is disputing whether any of Plaintiffs' studies actually causes more than de minimis harm, that is a post-hoc determination, and a legal conclusion, not a factual dispute.

Para. 100: Plaintiffs' intention in providing false or misleading speech to websites they study

as part of their research plan is to conduct academic research into online discrimination. Wilson Dec. at ¶ 49; Mislove Dec. at ¶ 46.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 101: Plaintiffs' intention in providing false or misleading speech to websites they study as part of their research plan is to determine whether online hiring websites use algorithms whose results discriminate against job seekers by race, gender, or other protected class status under civil rights laws. Wilson Dec. at ¶ 50; Mislove Dec. at ¶ 47.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Moreover, Plaintiffs lack a valid foundation for them to opine on legal concepts such as discrimination under civil rights laws. *See* Mislove Depo. Tr. at 153–54; Wilson Depo. Tr. at 125, 144.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding

to D-SMF § I.C). Plaintiffs' Mislove and Wilson's testimony speaks for itself, and does not refer to questions of ultimate legal liability, but to what they intend to test for: differing treatment on the basis of characteristics that are protected under civil rights laws, such as race or gender (or other defined characteristics).

Para. 102: As part of their research plan, Plaintiffs do not intend to access any data or information on the websites they study that is not made available to the public or to any individual who creates an account on the site. Wilson Dec. at ¶ 51; Mislove Dec. at ¶ 48.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed (including identifying the relevant platforms), Defendant cannot meaningfully evaluate the accuracy of this statement. *See* D-SMF § III.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves and refer to their intended research. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A), paragraphs 42–48 (corresponding to D-SMF § I.C), and paragraphs 49–60 (corresponding to D-SMF § III).

Para. 103: Plaintiffs are concerned that violating terms of service in the course of the research plan will subject them to criminal prosecution under the Access Provision. Wilson Dec. at ¶ 52; Mislove Dec. at ¶ 49.

DEF. RESPONSE: Disputed because Plaintiffs do not actually fear prosecution. *See* Mislove Depo. Tr. at 146–47; Wilson Depo. Tr. at 142, 147. Nor would any subjective

fear of prosecution be objectively reasonable. *See* D-SMF § I.B.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and deposition testimony speak for themselves. In the pages of his deposition cited by Defendant, Plaintiff Mislove testified that "you are essentially relying on prosecutorial discretion about whether or not to bring charges" and "while I don't think it is likely, it is something that I think about and it does affect my sort of thinking on a lot of this" and that "it really weights heavily on my mind . . . am I exposing my students to criminal—to potential criminal prosecution or the risk." Mislove Depo. at 146–47 (Def. Ex. 3, ECF No. 53-3). In the pages of his deposition cited by Defendant, Plaintiff Wilson testified "I perceive significant risk around this lawsuit" and nowhere discusses a lack of concern that violating terms of service in the course of the research plan will subject him to criminal prosecution under the Access Provision. *See* Wilson Depo. at 142, 147 (Def. Ex. 4, ECF No. 53-4). Lastly, the question of whether any subjective fear of prosecution is objectively reasonable is a question of law and not a dispute of fact.

Para. 104: Plaintiffs do not wish to be exposed to criminal prosecution as a result of conducting the research plan to study online discrimination. Wilson Dec. at ¶ 55; Mislove Dec. at ¶ 51.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, Plaintiffs do not actually fear prosecution, nor would any fear be objectively reasonable. *See* Mislove Depo. Tr. at 146–47; Wilson Depo. Tr. at 142, 147; D-SMF § I.B.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations and

deposition testimony speak for themselves regarding their fear of prosecution. In the pages of his deposition cited by Defendant, Plaintiff Mislove testified that "you are essentially relying on prosecutorial discretion about whether or not to bring charges" and "while I don't think it is likely, it is something that I think about and it does affect my sort of thinking on a lot of this" and that "it really weights heavily on my mind . . . am I exposing my students to criminal—to potential criminal prosecution or the risk." Mislove Depo. at 146–47 (Def. Ex. 3, ECF No. 53-3). In the pages of his deposition cited by Defendant, Plaintiff Wilson testified "I perceive significant risk around this lawsuit" and nowhere discusses a lack of concern that violating terms of service in the course of the research plan will subject him to criminal prosecution under the Access Provision. *See* Wilson Depo. at 142, 147 (Def. Ex. 4, ECF No. 53-4). Lastly, the question of whether any subjective fear of prosecution is objectively reasonable is a question of law and not a dispute of fact. Plaintiffs' objection regarding their intent to conduct their research plan is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

Para. 105: Plaintiffs intend to engage in the research plan because they believe that it will have significant social value. First, individual algorithm audits may uncover harmful discriminatory practices that, once exposed, will force the relevant parties to change their behavior. This may also deter other organizations from using similar algorithms. Second, Plaintiffs' research findings will aid academics and regulators who wish to expand on Plaintiffs' findings or conduct their own audits. Finally, by educating computer scientists and

the general public about the phenomenon of intentional or unintentional algorithmic discrimination, Plaintiffs hope to inform an important societal debate about the role and norms of algorithms in daily life. Wilson Dec. at ¶ 56; Mislove Dec. at ¶ 52.

DEF. RESPONSE: Disputed because Plaintiffs do not have any concrete plans to conduct this research, nor have they fully designed a study to accomplish this research. *See* D-SMF §§ I.A, I.C. Additionally, because the study has not yet been fully designed, Defendant cannot meaningfully evaluate the accuracy of this statement.

PL. REPLY: No genuine issue of fact. No record dispute. Plaintiffs' declarations speak for themselves. Plaintiffs' objection is more fully set forth in Plaintiffs' Response to Defendant's Statement of Material Facts Not In Dispute, responding to paragraphs 5–7 (corresponding to D-SMF § I.A) and paragraphs 42–48 (corresponding to D-SMF § I.C).

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Respectfully submitted,

/s/ *Esha Bhandari*
Esha Bhandari
Rachel Goodman
Naomi Gilens
American Civil Liberties Union
Foundation
125 Broad St., 18th Floor
New York, NY 10004
Tel: 212-549-2500
Fax: 212-549-2654
ebhandari@aclu.org
rgoodman@aclu.org
ngilens@aclu.org

Arthur B. Spitzer (D.C. Bar No. 235960)
American Civil Liberties Union
of the Nation's Capital
915 15th Street, N.W., Second Floor
Washington, D.C. 20005
Tel: 202-457-0800

Fax: 202-457-0805
aspitzer@acludc.org

Attorneys for Plaintiffs