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The Philosopher's Stone: AI Discrimination in Recruitment Can Turn Claims into Gold, If You Can Find It

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Early 20th century American history is defined by the mechanization that transformed human life more in a span of decades than all of the previous millennia.[1] Driven by technology, this rapid change is appropriately called the Industrial Revolution.[2] From the steam engines that connected the ends of our country together, to the light bulb that quickly found its way into almost every home and every street, human life was redefined in a matter of decades. Today's technology far surpasses that of the Industrial Revolution and continues to progress at an exponential rate as we enter a new technological era of our own.[3] The gap between world changing technological developments shrinks with every milestone as we computerize our lives.[4]

This new revolution is defining the 21st century the way the Industrial Revolution defined the 20th, and the key to understanding the future comes with understanding artificial intelligence, or AI for short.[5] The steam engine of the digital age, AI dominates an ever-increasing portion of our lives, and by extension the legal field.[6] Advanced search engines in our

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[1] Peter Marsh, THE NEW INDUSTRIAL REVOLUTION 218 (2012). Accessed April 25, 2021. http://www.jstor.org/stable/j.ctt5vkxfj.14.
[2] Jan de Vries, *The Industrial Revolution and the Industrious Revolution*, 54 THE JOURNAL OF ECONOMIC HISTORY 249, 249-251 (June 1994).
[3] Marsh, *supra* note 1, at 222.

[4] *Id*. At 220.
[5] Michael Horowitz & Paul Scharre, ARTIFICIAL INTELLIGENCE: WHAT EVERY POLICYMAKER NEEDS TO KNOW 3 (2018). Accessed April 25, 2021.
[6] *See* Eileen Smith Ewing, *Message from the Chair Artificial Intelligence: Revolution or Evolution?* ABA SCITECH LAW (2017).

beloved Westlaw and Lexis databases, personal assistants in our phones like Siri, and countless other examples show how AI has revolutionized an attorney's job.

AI has also revolutionized the very process of getting a job. ZipRecruiter, one of many job board and social networks that specialize in advertising employment opportunities, has 25 million monthly active users and, as of March 11th, 2021, 9 million job postings.[7] ZipRecruiter and its competitors are more than just digital job boards, they offer sophisticated programs that help employers find the best fit for their vacancies. Job boards like LinkedIn utilize AI that learn primarily from employer input; the advertising employer reviews applicants brought through the service and rates their eligibility.[8] The AI then learns from those ratings and uses that information to find new applicants that fit the trend of high-rated applicants.[9] Although most applicant-focused AI work the same on a fundamental level, the inner workings of these machines are jealously guarded by a combination of legal protections and trade secrecy.[10]

In 2014 Amazon created its own recruitment AI in an effort to cut out the middleman and potentially even branch into the employment market themselves.[11] Amazon, like many other giants in the digital age, was looking for the "holy grail" of recruitment; a program that would not only filter out bad candidates but put the perfect fits at the top.[12] Ideally, this program would replace the time-consuming and resource-intensive interview process that defines the modern

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[7] Craig Smith, *ZipRecruiter Statistics and Facts (2021) | By the Numbers* https://expandedramblings.com/index.php/ziprecruiter-statistics-and-facts/.
[8] Linda Emma, *How Does LinkedIn Work?* CHRON (Feb. 5, 2019), https://smallbusiness.chron.com/linkedin-work-11688.html.
[9] LinkedIn (Ap. 1, 2021, 10:57 AM), https://www.linkedin.com/talent/post-a-job?trk=flagship3_job_home
[10] Michael Risch*, Hidden in Plain Sight*, 31 BERKELEY TECH. L.J. 1635 (2016).
[11] Isobel Asher Hamilton, *Amazon built an AI tool to hire people but had to shut it down because it was discriminating against women*, BUSINESS INSIDER (Oct 10, 2018, 5:47 AM), https://www.businessinsider.com/amazon-built-ai-to-hire-people-discriminated-against-women-2018-10.
[12] *Id*.

understanding of employment.[13] But in 2015 Amazon discovered a flaw with the potential to create a legal nightmare.[14] Amazon's AI had decided that because most successful software developers and technical employees were men, the best candidates are men.[15] The AI penalized resumes for any mention of the word "women's" and downgraded the value of degrees from all-women's colleges.[16] Amazon edited the programs to no longer make decisions based on sex, but still scrapped the project a year later.[17]

Amazon narrowly avoided an incident by scrapping the secret project before any damage was done. Amazon is a company often on the cutting edge of technology, but they are but one of a number of tech giants.[18] Google and Facebook are fierce competitors in the field, and it is not uncommon for all three to be working on the same goal with their own respective projects. This is not to mention companies of equal size such as Wal-Mart who have just as much interest in a computer program that could supplement if not replace their expansive HR departments. This gives ample justification to ask if Amazon is not the only incident of AI discrimination to have happened, but rather the only one to have been caught.

It is possible, even probable, that AI out in the market today that suffer from the same flaws as Amazon's AI.[19] It would be a clear-cut case of systemic disparate treatment, or intentional discrimination, if a human did what Amazon's AI did. The theory of disparate treatment has evolved through court precedent and legislative amendments to encompass

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[13] Jeffrey Dastin, *Insight- Amazon scraps secret AI recruiting tool that showed bias against women,* REUTERS (Oct. 9th, 2018) https://www.reuters.com/article/amazon-com-jobs-automation-idINKCN1MK0AH.
[14] *Id.*
[15] *Id.*
[16] *Id.*
[17] *Id*.
[18] *See* Julien Lauret, *Amazon's sexist AI recruiting tool: how did it go so wrong?* BECOMING HUMAN (Aug 16, 2019), https://becominghuman.ai/amazons-sexist-ai-recruiting-tool-how-did-it-go-so-wrong-e3d14816d98e.
[19] *Id.*

employers and their direct subordinates, but it is unclear if it applies to AI.[20] AI in general has little to no meaningful legislation, AI in the workplace included. One of the few attempts at legislating this growing field comes out of Illinois that does little more than require employers give notice to job applicants they are being monitored by AI during interviews.[21] Another attempt at AI legislation is the Algorithmic Accountability Act, which was introduced to the House and Senate floors in 2019.[22] Originally introduced in response to a law suit by the Department of Housing and Urban Development against Facebook for discriminating against protected classes for housing advertisements, the bill would be a step towards addressing AI in a similar vein as employment discrimination.[23] The bill falls short of properly addressing the growing concerns, as it would at best only regulate automated decision making, and would do nothing for potential plaintiffs should any discrimination occur regardless.[24]

Until legislators catch up to the rate of technological growth, lawyers and courts alike must work within existing framework to adapt to an evolving world. Given the current state of employment law and political climate regarding AI, employers should be wary when using such tools in recruitment efforts. An employer using an AI that discriminates against protected classes under Title VII and ADEA can find themselves liable under either the theories of disparate impact or disparate treatment. Drawing on product defect and manufacturer liability, a new cause of action can arise allowing plaintiffs to sue the developers of a discriminating AI when the AI

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[20] Natalie A. Pierce, Tiana R. Harding, *The Implications and Use of Artificial Intelligence in Recruitment and Hiring*, ORANGE COUNTY LAW, February 2020, at 38
[21] 820 Ill. Comp. Stat. Ann. 42/5.
[22] Adi Robertson, *A new bill would force companies to check their algorithms for bias*, THE VERGE (Apr. 10, 2019 3:52PM) https://www.theverge.com/2019/4/10/18304960/congress-algorithmic-accountability-act-wyden-clarke-booker-bill-introduced-house-senate.
[23] *Id.*
[24] *Id.*

creates its own discriminatory biases. Although Congressional amendments to labor law will be needed before long, courts can work within existing framework to ensure justice for plaintiffs.

The legal frameworks for employment discrimination predate recruitment AI, but they still establish the foundation for legal claims.[25] Proving these claims is challenging, as with any discrimination case. Evidentiary hurdles native to discrimination claims apply to these new issues just as much as traditional discrimination actions.[26] The promise of a line of code revealing an AI is discriminating based on protected status, a philosopher's stone that can turn a claim to gold, may entice plaintiff-serving employment firms to pursue claims against AI-using employers. The claims are valid and legal minds in the field of labor law should be aware of what may become a common place issue in years rather than decades.

The question of liability is recognizable as one well-litigated and grounded in legal precedent when AI is stripped of the mystique of science fiction. AI is a tool, and an employer is liable for harms caused by use of the tool.[27] The deciding factor between what kind of discrimination, whether it be disparate impact or disparate treatment, is whether the employer was aware of the AI's discriminating tendencies. To fully understand this application of law, it is crucial that a basic understanding of AI is accompanied by knowledge of the twin theories of disparate impact and treatment. This provides guidance as to employment liability and reveals the practical limitations of the law as it stands regarding evidentiary requirements and burdens on potential plaintiffs.

I. Artificial Intelligence in a Nutshell

[25] Stephanie Bornstein, *Antidiscriminatory Algorithms*, 70 ALA. L. REV. 519, 524-526 (2018).
[26] *Id*. at 553.
[27] *Id*. at 525.

Before an analysis of the law in question and how AI fits into the current employment law scheme, it should be explained what exactly constitutes an AI and how they work. A simple explanation is that AI are computers that learn.[28] This sets out a very broad category often disappointing to those who grew up on *Star Trek*. "Simple" computers such as calculators and home computers fail to classify as AI, while a phone's predictive text does.[29] There are two kinds of AI; narrow or "weak" AI and general or "strong" AI.[30] These definitions come from an AI's ability to learn, machine learning and deep learning.[31] Regardless of the type of AI or the way it learns, all AI are subject to biases and this is the foundation for many of the legal implications arising from AI.[32] A subtle yet compounding complication to understanding AI comes from the difficulty in understanding a particular AI and cracking the black box.[33]

a. Weak and Strong AI

There are two broad categories which are used to classify AI: narrow AI and Artificial General Intelligence (AGI). Narrow AI, sometimes referred to as "weak AI" are designed and developed for a narrow scope of purpose.[34] While they excel at those limited tasks, a narrow AI designed to alert Westlaw users of a personally relevant opinion recently published would be unable to screen their emails for virus-laden links. AGI, or strong AI, are those that can apply intelligence to any problem at hand.[35] The subject of many a novel and movie, these AI are being developed and will have an enormous impact in almost every legal field. This is a future some

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[28] ITechLaw, RESPONSIBLE AI: A GLOBAL POLICY FRAMEWORK, 20, (Charles Morgan, 1st Ed. 2019).
[29] The term "intelligence" refers to an AI's ability to learn, and not its ability to act intelligently as we use the term. No one has ever accused a smartphone's predictive text of being intelligent.
[30] IBM, *Strong AI*, IBM CLOUD EDUCATION (Aug. 31, 2020), https://www.ibm.com/cloud/learn/strong-ai.
[31] *Id*.
[32] ITechLaw, *supra* at note 24, at 136.
[33] *Id*. at 147.
[34] IBM, *supra* at note 29.
[35] *Id.*

time away as strong AI of this caliber are rarely seen outside research labs, and narrow AI dominate the market.[36] The immediate issues are those posed by the narrow AI widely available on the market now and still being developed and improved.

b. Machine Learning and Deep Learning

Most AI are like those that LinkedIn uses; a program that takes data and establishes patterns from it to modify future actions. These AI do this through algorithms and a process known as machine learning.[37] An algorithm is a process or set of rules to be followed for problem-solving applications.[38] Although the term is shrouded in scientific clout, an algorithm is something legal minds are trained for. Legal professionals form sets of rules from case precedent, administrative regulations, and statutory law, and then apply sets of facts to them to create legal outcomes. AI do much the same with coded programming and gathered data.

Machine learning is the term for computers learning through algorithms.[39] When a computer encounters a problem, it extracts patterns from data.[40] The AI then uses those patterns to associate outcomes with certain features that can then be applied to new situations.[41] This allows the AI to take information and patterns from one problem and on to the next, that new knowledge making it better equipped to deal with future problems.[42] Deep learning is considered a subfield or evolution of machine learning and is more complicated.[43] Replicating the neural network of a brain, the AI has a "thought process" that goes through neural networks of decision

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[36] *Id*.
[37] *ITechLaw*, *supra* at note 24, at 21.
[38] *Id*.
[39] *Id*.
[40] *Id*. at 22.
[41] *Id.*
[42] *Id*.
[43] *Id*.

making.[44] The technical aspect behind this is fascinating, but largely irrelevant from a legal perspective and it will suffice to say that deep learning enables more sophisticated and powerful AI.[45]

c. Algorithmic Bias

No matter the kind of learning an AI utilizes or their purpose, an AI learns. An AI's programming allows it to learn, and as with anything taught, it is susceptible to bias.[46] Algorithm bias is the term for a systemic pattern of errors creating unfair or undesired outcomes.[47] This bias can occur on either level; the machine's own learning can create and develop biases, or the program can inherit biases from its developer.[48]

An AI can find patterns without accounting for the cause of them and draw an incorrect correlation. Relating back to Amazon, that AI determined a successful tech employee was male by finding a pattern that most successful employees were male. It did not consider the underlying issues of gender breakdowns in tech,[49] and that only about 25% of computing roles are held by women.[50] Underrepresentation of women in STEM fields is a well-known issue and although many employers are actively seeking to remedy such issues, computers are unaware of cultural

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[44] *Id*.
[45] *Id*.
[46] Genie Barton, Nicol Turner Lee, Paul Resnick, *Algorithmic Bias Detection and Mitigation: Best Practices and Policies to Reduce Consumer Harms*, BROOKINGS (May 22, 2019), https://www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/.
[47] *Id*.
[48] *Id*.
[49] Jenny Little, *Ten years on, why are there still so few women in tech?* THE GUARDIAN (Jan 2, 2020 7:19 AM), https://www.theguardian.com/careers/2020/jan/02/ten-years-on-why-are-there-still-so-few-women-in-tech.
[50] Rani Molla and Renee Lightner, *Diversity in Tech,* THE WALL STREET JOURNAL (Apr. 10, 2016 12:00 PM), http://graphics.wsj.com/diversity-in-tech-companies/.

problems experienced by humans. While some critics claim this social blindness is one of the greatest virtues of a computer, this creates a perpetuating bias.[51]

When a computer mistakenly finds a correlation and develops a rule based on the pattern it has discovered, it applies that rule towards the next problem and set of data.[52] Since this underlying rule is wrong, the next pattern it finds and next rule it creates is based on faulty logic and is more likely than not to also be wrong.[53] This chain eventually ends in a program that is entirely mistaken, and all results from a single bias.[54]

The other source of bias in AI are the biases of the developer. A prime example is facial recognition software. Facial recognition technology is a rapidly expanding market, from governments that seek to increase security through identification databases to retail chains that seek to create stores without any employees.[55] Facial recognition software suffers from bias; the three leading facial recognition AI have a 30% higher error rate when identifying darker skinned people.[56] Developers determined that the primary causes for these errors came not from the AI's learning, but from the system development itself.[57] Development teams were primarily white men, and the facial feature points the program focused on were based on those distinguishable in white men.[58]

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[51] *See* Stephanie Bornstein, *Antidiscriminatory Algorithms*, 70 ALA. L. REV. 519, 557 (2019).
[52] Philip Adler et al., *Auditing Black-Box Models for Indirect Influence,* 54 KNOWLEDGE & INFO. SYS. 95 (2018), https://doi.org/10.1007/s10115-017-1116-3.
[53] *Id.*
[54] *Id.*
[55]Devin Coldewey, *Inside Amazon's surveillance-powered, no-checkout convenience store*, TECH CRUNCH (Jan 21, 2018 10:01 AM), https://techcrunch.com/2018/01/21/inside-amazons-surveillance-powered-no-checkout-convenience-store/.
[56]Alex Najibi, *Racial Discrimination in Face Recognition Technology*, HARVARD UNIVERSITY SITN, (Oct. 24, 2020), https://sitn.hms.harvard.edu/flash/2020/racial-discrimination-in-face-recognition-technology/.
[57] *Id.*
[58] *Id.*

The AI was created from by a team with specific perspective that led to overlooking important distinguishing features. The own-race bias (ORB) is a phenomenon that has been the subject of intensive psychological study for decades.[59] The two prominent theories explaining this phenomenon are the exposure theory and the contact theory.[60] The former theory is that exposure at a young age to one's own race shapes the facial recognition function of the brain, and the latter theory that since a person is more likely to come into contact with members of their own race more often and thus have a larger mental database to draw patterns across.[61] Under either theory though, this phenomenon is inherited by the developed AI and it logically follows that any bias held by the developer is likely to occur in the AI.[62]

d. The Black Box

One final matter to mind is the accessibility of AI and AI generated data. Many think that because an AI relies on written code, its mind can be read by looking into its inner workings. Unfortunately AI code reads more like tea leaves than literature, and the inner workings are often called "black boxes" due to their virtually impenetrable nature.[63] Black boxes are volumes of information obscured in part due to the secretive nature of developers, and in part because of the nature of the data itself.[64] Developers guard the details of their AI's inner workings to prevent piracy and plagiarism.[65] This secrecy compounds the already befuddling nature of AI, as they are so complicated, technical, and overwhelming by the sheer quantity of information and composite

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[59] Hoo Keat Wong, Ian Stephen, David Keeble, *The Own-Race Bias for Race Recognition in a Multiracial Society*, FRONTIERS IN PSYCHOLOGY (Mar. 6th, 2020), https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00208/full.
[60] *Id.*
[61] *Id.*
[62] *See generally* Najibi, *supra* at note 50.
[63] ITechLaw, *supra* at note 24, at 105.
[64] *Id.*
[65] *Id.*

code.[66] This black box within a black box permeates any legal issue in which AI is involved and will quickly become an evidentiary quagmire for litigators across the legal landscape.

II. Relevant Current Law for Analysis

Although it has been around two decades since the last major employment bill has made its way through Congress, employment law has branched and grown in that time. Employment law has grown more like a briar bush than a beech tree though, and it is easy to become entangled in the mess. In regard to hiring and recruitment, there are primarily two theories of employment discrimination.[67] The theories of disparate treatment and disparate impact allow challenges to practices that discriminate against the individual, discrimination being a term of art.[68] Discrimination is defined as "the unjust or prejudicial treatment of different categories of people… especially on the grounds of race, age, or sex."[69] The field of law governing discriminatory hiring practices and promotions is primarily rooted in two Acts; Title VII of the Civil Rights Act of 1964 (Title VII)[70] and the Age Discrimination in Employment Act (ADEA).[71]

Products liability in some senses is simpler than the relevant employment law because products liability can be strict liability.[72] In other it is more nuanced because it derives from tort and contractual law, governed by state product liability law rather than federal statute.[73] For the

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[66] *Id.* at 106.
[67] Charles A. Sullivan & Michael J. Zimmer, CASES AND MATERIALS ON EMPLOYMENT DISCRIMINATION 94 (9th ed.2020).
[68] *Id.*
[69] THE NEW OXFORD AMERICAN DICTIONARY 488 (2001).
[70] Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§2000e.
[71] Age Discrimination in Employment Act, 29 U.S.C. §§621-633a.
[72] LEGAL INFORMATION INSTITUTE, https://www.law.cornell.edu/wex/products_liability (last visited Apr. 27, 2021).
[73] *Id*.

purposes of the relevant analysis, the approach the majority of states take towards product liability specific to software will be discussed.

a. Disparate Treatment

Disparate treatment is the more obvious of the two discrimination theories, and the most common.[74] Disparate treatment "is the most easily understood type of discrimination. The employer simply treats some people less favorably because of their race, color, religion, sex, or national origin."[75] In lay terms, disparate treatment is intentional discrimination. Disparate treatment is proven in one of two ways; demonstrating a formal policy of prohibited discrimination, or by proving a pattern of employment decisions that circumstantially prove a practice of discrimination.[76]

Employers rarely have formal policies of illegal discrimination though, and plaintiffs generally have to establish a pattern of employment decisions to prove a practice of discrimination.[77] The common structure for proving this is established by *McDonnell Douglas* and holds that a plaintiff establishing a prima facie case creates a presumption that the employer discriminated.[78] When a formal policy of discrimination exists, the plaintiff has the burden to prove a prima facie case.[79] A plaintiff is required to 1) prove she belongs to a protected class, 2) that she applied and was qualified for a vacant position, 3) despite her qualifications, she was rejected, and 4) the position remained open and the employer continued to seek applicants from

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[74] Kevin M. Clermont & Stewart J. Schwab, *Employment Discrimination Plaintiffs in Federal Court: From Bad to Worse?*, 3 Harv. L. & Pol'y Rev. 103 (2009).
[75] *Teamsters v. United States*, 431 U.S. 324, 335 n.15 (1977).
[76] Charles A. Sullivan & Michael J. Zimmer, CASES AND MATERIALS ON EMPLOYMENT DISCRIMINATION 94 (9th ed.2020).
[77] There are a number of exceptions to the blanket prohibition of discrimination based on protected classes. The most obvious and common are ministerial positions and other religious based jobs.
[78] *McDonnell Douglas*, 411 U.S. 792, 802.
[79] *Id.*

people with the plaintiff's qualifications.[80] From there the burden shifts to the employer to put into evidence a nondiscriminatory reason for the alleged discriminatory decision.[81] This shifts the burden of proof back to the plaintiff, who must then show that the proffered reason was simply a pretext.[82] Proving pretext offers numerous evidentiary problems and few cases survive pleadings, let alone summary judgment.[83]

b. Disparate Impact

Policies that are nondiscriminatory on their face but have a disproportionately negative effect on members of legally protected groups are considered to have a disparate impact.[84] Because these policies are facially neutral, disparate impact has no intent requirement and looks at the protected class as a group, contrary to the purely individualized scope of disparate treatment.[85] Tests with little to no relation to an employee's performance,[86] arbitrary requirements as to height, weight[87], and even more subjective criteria like specific skills[88] can classify as policies with disparate impact.

Disparate impact came to the legal centerstage in *Griggs*, a Supreme Court case holding that Title VII prohibited facially neutral employment policies resulting in discrimination on the basis of a protected trait.[89] To make a prima facie case of disparate impact, a plaintiff must prove

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[80] *See McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 (1973).
[81] *Id*.
[82] *Id*. At 803.
[83] *See* Joe S. Cecil, Rebecca N. Eyre, Dean Miletich & David Rindskopf, *A Quarter-Century of Summary Judgment Practice in Six Federal District Courts*, 4 J. EMPIRICAL LEGAL STUD. 861, 886-89 (2007).
[84] Frank D. Vinik. "Disparate impact." *Encyclopedia Britannica*, 2018. https://www.britannica.com/topic/disparate-impact.
[85] Charles A. Sullivan & Michael J. Zimmer, CASES AND MATERIALS ON EMPLOYMENT DISCRIMINATION 96 (9th ed.2020).
[86] *See Griggs v. Duke Power Co*., 401 U.S. 424 (1971).
[87] *See Dothard v. Rawlinson*, 433 U.S. 321 (1977).
[88] *See Watson v. Fort Worth Bank & Trust* 487 U.S. 977 (1988).
[89] *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971).

that 1) she is a part of a protected class, 2) the employer has implemented a practice that produces an adverse effect to protected individuals, 3) because of status as part of the protected class.[90] To prove the third element of causation, the plaintiff will use either the statistical significance test or the four-fifths rule.[91] Statistical significance tests requires a plaintiff to prove a specified level that the observed disparity is not due to random chance, the level usually being ninety-five percent.[92] The four-fifths test requires a plaintiff prove a group's pass rate is four-fifths less than another group.[93]

The evidentiary hurdles of disparate impact claims stem from convincing a court of one's preferred statistical correlation. Disparate impact claims do not follow structures like *McDonnell Douglas*, and instead rely heavily on statistics, allowing comparisons such as a protected class's representation in a certain employer's practice and that class's representation in the local labor market.[94] The current trend across Circuit courts follows the Second Circuit in holding that the existence of a disparity amongst a general population does not necessarily correlate to the pool of applicants qualified for the jobs in question.[95] Beyond that, the subject of many arguments in disparate impact claims comes down to which statistics the court should use, and how.

c. Title VII and the ADEA

Title VII gives protection to individual employees from discrimination based on; "race, color, religion, sex[96], or national origin.[97]" Protected activities include failure or refusal to "hire

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[90] 42 U.S.C. §§2000e-2(k)(1)(A).
[91] *See* Jennifer L. Peresie, *Toward A Coherent Test for Disparate Impact Discrimination*, 84 IND. L.J. 773 (2009).
[92] *Id.* At 774.
[93] *Id*.
[94] *See Hazelwood School District v. United States*, 433 U.S. 299 (1977).
[95] *See Mandala v. NTT Data, Inc.*, 975 F.3d 202, 205 (2d Cir. 2020).
[96] As of 2020, The Supreme Court has read "sex" to includes homosexuals and transgenders. *Bostock v. Clayton County*, 140 S. Ct. 1731 (2020).
[97] 42 U.S.C. §§2000e-2(a).

or discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment,…" or "to limit, segregate, or classify his employees… in any way which would deprive or tend to deprive any individual of employment opportunities, or otherwise adversely affect his status as an employee…."[98] Title VII's recognition of disparate impact claims is written into the Act itself, requiring a plaintiff to prove a "particular employment practice that causes a disparate impact… and the respondent fails to demonstrate that the challenged practice is job related for the position in question and consistent with business necessity."[99] Case law provides for Title VII claims on disparate treatment, as noted in *McDonnel Douglas*.[100]

The other Act which protects employees and applicants is the ADEA, though it does so only for those over the age of 40.[101] The ADEA uses near identical language in its prohibition of employer actions.

> (a) *Employer practices.* It shall be unlawful for an employer—
>
> (1) to fail or refuse to hire or to discharge any individual or otherwise discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's age;
>
> (2) To limit, segregate, or classify his employees in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's age…[102]

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[98] *Id*.
[99] 42 U.S.C. §§2000e-2(k)(1)(A).
[100] *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973).
[101] 29 U.S.C. §§631(a).
[102] 29 U.S.C. §§623.

To some extent, the ADEA offers less protection due to the nature of the protected class. Age is often accompanied by physical change and traits that may be job relevant. This makes it more likely there exists a legitimate reason for discrimination relating to business necessity, or at least easier for employers to establish a believable pretext. Despite this practical limitation, courts analyze ADEA claims near the same way they analyze Title VII claims, reading Title VII interpretation into the ADEA.[103] Claims of disparate impact and treatment for ADEA cases are equally viable and follow the same structure and evidentiary requirements as those under Title VII, and can effectively be treated as the same body of law for the purposes of AI in hiring.[104]

While both disparate impact and disparate treatment are recognized under both applicable bases of employment law, the two claims will rarely apply to the same set of facts. The core of disparate impact is that the policy or action challenged is facially neutral. Employment discrimination as a field of law is focused on the individual and as-applied cases, and disparate treatment is the epitome of this. To prove a disparate treatment case, the plaintiff must prove that they were discriminated against because of their protected status. Disparate impact is less focused, as it challenges a policy which will disproportionately affect a specific class. While the discrimination case will be focused on the individual bringing suit, the case will focus on a policy that affects an entire class. While it is important to keep the differences in mind since the practical differences of the two theories render a bright line between the two, AI manages to blur that line.

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[103] In relation to awarding privileges and benefits to employees in a discriminatory manner, the Supreme Court held that "this interpretation of Title VII… applies with equal force in the context of age discrimination, for the substantive provisions of the ADEA 'were derived *in haec verba* from Title VII.'" This interpretation has been applied broadly to most aspects of discrimination in the ADEA.

[104] Charles A. Sullivan & Michael J. Zimmer, CASES AND MATERIALS ON EMPLOYMENT DISCRIMINATION 18 (9th ed.2020).

d. Products Liability

Products-liability is a claim derived from contract and tort law that a party can hold manufacturers, processors, distributors, and sellers of products liable for personal injury or property damage allegedly resulting from use.[105] A products liability claim may be brought under several theories, including strict liability, breach of warranty, and negligence.[106] A plaintiff can bring a products liability claim under a theory of strict liability when a product; 1) contains a manufacturing defect even when a product is used with all possible care, 2) is defective in design when the foreseeable risks of harm could have been reduced or avoided by adoption of a reasonable alternative design, or 3) is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of such.[107]

To prove a defective design under strict liability, a plaintiff must prove; 1) the seller was engaged in the business of selling the product that caused the harm, 2) the product was defective when sold, 3) the product was unreasonably dangerous to the user or consumer, 4) the product was received by the consumer in substantially the same condition as produced, and 5) the plaintiff's damages were a direct and proximate cause of the defect.[108] There is a split amongst jurisdictions as to whether there is a difference between negligence and strict liability in design defect cases.[109]

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[105] 63 Am. Jur. 2d Products Liability § 1.
[106] *Talkington v. Atria Reclamelucifers Fabrieken BV*, 152 F.3d 254, 258 (4th Cir. 1998) (applying South Carolina law).
[107] Restatement (Third) of Torts: Prod. Liab. § 2 (1998).
[108] 63 Am. Jur. 2d Products Liability § 530 (citing *Haag v. Bongers*, 256 Neb. 170 (1999)).
[109] 63A Am. Jur. 2d Products Liability § 873 (citing *Stanley v. Schiavi Mobile Homes, Inc*., 462 A.2d 1144 (Me. 1983)).

For our purposes, there is no meaningful difference between the two tort theories because any harm caused would be purely economic and exist under the contractual portion of products liability.[110] Under contract law, a party can contract a manufacturer, designer, or distributor of a product to indemnify and hold them harmless in case of liability in a civil suit.[111] Specifically to software, neither state legislatures nor courts have been unified in their application of product liability to software.[112] Although there is growing pressure for legislative action in this regard due to the inadequacy of current law, there is a growing trend in application of products liability to software.[113] For the purposes of analyzing AI-based claims under Title VII and the ADEA, there will be an assumption that a court embraces this trend.

III. Liability and AI in Employment

Recruitment AI can be designed in an incomprehensible variety of designs, but in the end, they will share certain aspects as they aim to achieve the same goal. AI used in employment will be used as tools to streamline the two most tedious aspects of hiring, reaching applicants and filtering applicants. At either step an AI may discriminate against prospective employees, and it is conceded that discrimination in the solicitation of applicants is less protected than denying applicants.[114] That is not to say that it is not protected though, as a case predicated on that issue

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[110] *See Golden Spread Elec. Coop., Inc. v. Emerson Process Mgmt. Power & Water Sols., Inc.*, 954 F.3d 804 (5th Cir. 2020) (holding that under Texas law a purely economic loss is only recoverable under contract law).
[111] *See Perez v. Vezer Indus. Pros., Inc*., 610 F. App'x 611 (9th Cir. 2015) (holding that under California law, indemnification clauses are generally enforceable). *See also Royal Palm Hotel Prop., LLC v. Deutsche Lufthansa Aktiengesellschaft, Inc.*, 133 So. 3d 1108 (Fla. Dist. Ct. App. 2014) (stating that although indemnification clauses are disfavored, they are enforced if an express intent to indemnify is clear and unequivocal).
[112] *See* Michael D. Scott, *Tort Liability for Vendors of Insecure Software: Has the Time Finally Come?,* 67 MD. L. REV. 425 (2008).
[113] *See generally* Greg Swanson*, Non-Autonomous Artificial Intelligence Programs and Products Liability: How New Ai Products Challenge Existing Liability Models and Pose New Financial Burdens,* 42 SEATTLE U. L. REV. 1201 (2019).
[114] Some courts have read *Northeastern Fla. Chapter, Associated Gen. Contractors of America v. Jacksonville*, 508 U.S. 656, 660-61 (1993) to allow claims based on the denial of opportunity to compete. *See Robertson v. Allied Sols., LLC*, 902 F.3d 690, 697 (7th Cir. 2018) (Holding that Art. III standing is met when a plaintiff complains she was deprived of a chance to obtain a benefit), *Shea v. Kerry*, 796 F.3d 42 (D.C. Cir. 2015) (stating that for standing

may soon come the Northern District of California, after having been dismissed with leave to amend.[115]

For the purposes of an employer's liability in a disparate treatment case, the steps will be analyzed using Amazon's AI as a fact pattern. The assumption will be that Amazon discovered the AI had developed a bias against women and used it for recruitment purposes anyway. Then a single fact will change; Amazon never discovered the algorithmic bias. This would turn the case into one of disparate impact, where intent is irrelevant. The disparate impact case will follow through into an analysis of whether or not the developer of the AI could be liable. Finally, *Bradley* will be examined as an example of a disparate treatment case where the employer intentionally set the program to discriminate and how the case's deficits can be remedied.

a. Disparate Treatment and Artificial Intelligence

Beginning the hypothetical recruitment process, Amazon's AI reaches out across the digital landscape and informs individuals about openings in their tech department. In doing so, it targets men specifically because it has decided women make inferior employees. The AI searches through LinkedIn pages for prospective employees with certain qualifications,[116] compiling a list of the men who meet them, and then sending them emails inviting them to apply for a position. Step one of the AI's function is complete, it has reached out to potential applicants

purposes a plaintiff need only be ready and willing should the opportunity have arisen), *Long v. Southeastern Pennsylvania Transportation Authority*, 903 F.3d 312 (3rd Cir. 2018) (stating that an injury of denial of opportunity satisfies standing because "the injury-in-fact element is not Mount Everest").

[115] *Bradley v. T-Mobile US, Inc.*, No. 17-CV-07232-BLF, 2020 WL 1233924 (N.D. Cal. Mar. 13, 2020). A class action suit of individuals over 40 have sued Amazon and T-Mobile for age discrimination. Amazon and T-Mobile advertised vacancies and solicited job applications through Facebook advertisements, and specifically filtered out individuals over the age of 54 and 38, respectively. The complaint was amended four times before being dismissed with leave to amend.

[116] AI can profile individuals through a number of ways. *See* Murad Ali, Zubair Shaikh, Muhammad Khan, Taha Tariq, *User Profiling Through Browser Finger Printing*, ATLANTIS PRESS, Nov. 2015, 135.

and specifically denied communicating vacancies to women. This creates the first cause of action; denial of opportunity to compete.

Although it seems obvious that this would be employment discrimination, bearing great resemblance to signs in the early 1900's saying, "No Irish Need Apply," this is perhaps the most difficult hurdle to jump. Technically Amazon has taken no action against these women, rather the claim would be based on inaction. Although Title VII and the ADEA both extend to applicants,[117] neither addresses solicitation of applicants. This is a unique problem of the AI age, where someone can mass-broadcast a message while targeting the audience at the same time. Before the era of the household computer, jobs were advertised in windows, newspapers, and magazines and an employer could not filter who received notice. This modern problem is unlikely to see federal legislation in the next few years and such claims will rely on judicial interpretation of right of opportunity.

In a jurisdiction with a narrow reading of the statute and standing, a claim based on discrimination in the solicitation of applications would not be actionable. In the Circuits that treat standing broadly, a plaintiff could sustain a claim they were discriminated against unlawfully by showing that they were denied an opportunity they were ready and able to act upon.[118] The plaintiff would be able to form a prima facie case by proving 1) she belongs to a protected class, 2) that she was able and ready to apply for the position, 3) despite her qualifications, she was denied, and 4) the position remained open and the employer continued to seek applicants from people with the plaintiff's qualifications. *McDonald Douglas* should apply in this situation

[117] §703(1) of Title VII and §623(1) of the ADEA specifically mentions failure or refusal to hire individuals, and §703(2) and §623(2) specifically mentions limiting, segregating, or classifying applicants.
[118] *Planned Parenthood of Greater Washington & N. Idaho v. U.S. Dep't of Health & Hum. Servs.*, 946 F.3d 1100, 1107 (9th Cir. 2020).

despite the plaintiff never being rejected for the position, creating a further framework for litigation. The solicitation of an application and the communication of a vacancy are both parts of the hiring process, as learning of a vacancy is the first step in any application process.

Under *McDonald Douglas*, successfully presenting a prima facie case would shift the burden of proof to Amazon and require them to prove a nondiscriminatory reason for their decision. Should Amazon manage to prove that their AI which specifically filters out women is not discriminating on the basis of sex, the burden of proof would shift back to the plaintiff to prove it a pretext. This step of *McDonald Douglas* would prove a challenging hurdle given that the AI itself admits through its coding a discriminatory intent. AI discrimination in the solicitation phase creates a legal action against employers, and the tool to make recruitment easier becomes the instrument of the employer's demise.

After soliciting applications from these candidates, the AI further filters out the chaff. For the sake of simplicity, we will assume the AI only has an algorithmic bias against women and seeks to further eliminate any that may have made it through the net. This analysis is straightforward and avoids the standing pitfall of discrimination in the solicitation phase. The prima facie case plays out like a law school hypothetical; 1) the plaintiff proves she is a part of a protected class, 2) she applied and was qualified for a vacant position, 3) despite her qualifications, she was rejected, and 4) the position remained open, and the employer continued to seek applicants from people with the plaintiff's qualifications. The *McDonald Douglas* framework works as designed and follows the same steps as it would in the solicitation phase without needing to adapt it for seeking applicants.

The key to proving a disparate treatment case is proving the intent. When humans are the employers and hiring officers, the evidence of discriminatory motive and intent is often difficult

to prove. Few are so kind to prospective plaintiffs as to write out every thought they have regarding applicants and their reasons for choosing one over another. As will be discussed in a later section, it is unlikely AI will be so kind either. Under existing legal framework, plaintiffs can make a case of disparate treatment at the hands of AI, and their employers are liable by knowingly using a system that intentionally discriminates based on a protected class.

b. Disparate Impact and Artificial Intelligence

In the circumstance that Amazon never discovered the AI's bias, plaintiffs would bring a suit under disparate impact rather than disparate treatment. In the AI's initial action, the first step of establishing standing will vex any potential plaintiff. A disparate impact claim has a unique advantage in this regard over disparate treatment, however. Disparate impact looks not at a specific instance or individual as does disparate treatment, but rather at the employer's practice. If the practice has a disparate impact on a protected class, then the practice violates Title VII. Separate hiring channels serve as evidence of a disparate policy.[119] Further, there is no mention of a "complaining party" needing to be an employee or applicant.[120] As previously mentioned, notice of a vacancy is the first step in the application process and deliberately withholding and a system that deliberately withholds information from a protected class of individuals will violate this provision of Title VII.

The facts fit the model for a disparate impact claim perfectly; the employer's facially neutral system produces an adverse employment action against individuals based on being a part of a protected class. If the AI's inner workings can be deciphered during discovery and proof of the AI's self-developed bias against protected classes discovered, then the case seems an easy

[119] *See Wards Cove Packing Co. v. Atonio,* 490 U.S. 642, 657 (1989).
[120] 42 U.S.C. §§2000e-2(k).

win for plaintiffs. An issue to be tackled later, it is best to assume that the inner workings of an AI would not be available during discovery and plaintiffs are required to prove disparate impact more conventionally.

Although the details and numbers of each case are unique to themselves, it is fair to assume that the AI would prove effective at its job. An AI would commit itself to filtering out all women from the application process, by failing to communicate vacancies to them and then removing any remaining female applicants from the resume pool. The AI's success would be an employer's failure, as plaintiffs would likely be able to show staggering disparity in the applicant and hiring pool. An AI curated resume pool that filtered out women could deliver to Amazon's HR department a list of 300 applicants ready to hire, all of them men. A plaintiff offering an applicant pool zero-percent female makes a compelling case of systemic disparate impact.

In terms of disparate impact cases, AI may prove too effective for their own good. Employers will want to be mindful of AI they utilize and monitor them closely for any rogue behavior. The lack of an intent requirement means even a good faith employer can find themselves liable under disparate impact. Worse yet, if they do discover a flaw in their system and continue to utilize the AI anyway, they establish a case of disparate treatment. Under the *McDonald Douglas* framework, a plaintiff could shift the burden of proof to the employer, and they would find it difficult to shift it back when their own tools paint them red-handed.

c. Liabilities of Parties Under Disparate Impact

If an AI develops its own algorithm to discriminate against suspect classes, an employer may be able to seek indemnification from the developer under a theory of product liability. Before establishing a claim of strict liability, the employer would need to prove that the AI is not

being misused or abused, or rather that the use was a reasonable one.[121] To establish a claim under strict liability, the employer would need to prove 1) the seller was engaged in the business of selling the product that caused the harm, 2) the product was defective when sold, 3) the product was unreasonably dangerous to the user or consumer, 4) the product was received by the consumer in substantially the same condition as produced, and 5) the plaintiff's damages were a direct and proximate cause of the defect.[122]

Although possible that an employer might find and repurpose an AI with a different purpose and use it for recruitment, it is more likely that an AI contracted for would be designed for the employer's purpose. Both parties in any potential litigation will spend a great deal of time in their briefs addressing this as it ties in with the second element. It is a fair disagreement whether an employer is be solely responsible for the AI's error, depending on how the AI is trained to accomplish its goal. If the employer is responsible for training the AI on desired qualities, the same way Amazon trained its AI on current employees, then the issue may not be a defect in design. Even then though, a sympathetic jury may find that the developer should have safeguards in place to protect against self-taught discrimination.

Assuming the facts of the hypothetical case allow a permissible argument, the employer would proceed to establish their case. The first element is often easily satisfied, as the employer need only prove the seller of the software, or the developer, is responsible for distribution or development of the product. The second element is tied to the previously discussed step of whether the AI was reasonably used. If the employer's actions were not the cause, or did not unreasonably cause the AI's discriminatory pattern, then the AI was defective when sold. The

[121] 63A Am. Jur. 2d Products Liability § 954.

[122] 63 Am. Jur. 2d Products Liability § 1.

third element is perhaps the most difficult to prove as it requires the employer prove the product was unreasonably dangerous to use. This element generally pertains to physical harm and is why purely economic losses are pursued under contract law rather than tort.[123] This analysis is still the most appropriate to use since the underlying cause of action, stemming from the act of discrimination in hiring *is* a tort.[124]

The difficulty in addressing this element comes from the novel nature of AI in law. It is difficult to tell what a reasonable AI is, let alone how it should identify prospective employees or how to rank them. It is easy to wander astray when exploring the legal wilderness of novel claims, so this article shall leave the details of this topic to others. Suffice to say that this would be one of the major turning points in a defective design case regarding discriminating AI. The fourth element is another issue of complex and novel issue. The standard of substantially does not apply well to AI, whose very purpose is to change and adapt. The proper analysis for AI in a defective design analysis would take this into account and seek to establish that the core processes and functions of the AI had not changed. This equates to modification outside of developer software updates and minor adaption to an employer's current system. The final element is if the employer's damages were the direct and proximate cause of the defect. An employer could prove this by showing that but-for the alleged defect of the AI, learning discriminatory practices based on protected classes, the employer never would have engaged in discriminatory practices by proxy and never have been sued.

In an ironic twist, a developer could rebut this element by claiming that the employer had a facially neutral yet discriminatory policy in place beforehand and the AI learned from this

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[123] Restatement (Third) of Torts: Prod. Liab. § 2 (1998).
[124] *Staub v. Proctor Hosp.*, 562 U.S. 411, 418 (2011).

violating practice. Many of these possible proofs an employer might make against a developer are rebuttable by both typical product liability defenses and even the claims of the original plaintiff bringing the employment discrimination claim themselves. A wary employer would be wise to contract for indemnification when licensing, purchasing, or paying for the development of an AI to avoid any more litigation outside well-defined law than is necessary. This rough adaptation of product liability in response to an adaptation of employment discrimination law to AI-based causes of action, which one could argue is a further and rougher adaptation of agency law, shows the need for legislative action. Employment is not alone in anticipating dramatic changes resulting from AI, and courts are poorly outfit for adapting to technical and alien causes of action. AI based causes of action are best described as alien, as they challenge many fundamental understandings of the law in these instances, and legislation is the best remedy.

d. *Bradley's* Folly

A cynical reader will not be swayed by a hypothetical situation based on an AI that was scrapped early in its life. It has already been conceded that a case, *Bradley*, confronts some of these novel AI issues has already found its way to court and has been dismissed for lack of standing. There are two issues that make *Bradley* a troublesome case, standing and jurisdiction. These two issues are likely to surface in any claim derived from internet actions and are like many legal problems deriving from online causes of action.[125] These problems require creative application of existing law written before the internet changed the world. *Bradley* is no different.

Bradley is a class action, represented by four plaintiffs and the Communications Works of America (CWA) on behalf of older workers discriminated against by T-Mobile and Amazon

[125] *See Mavrix Photo, Inc. v. Brand Techs., Inc.*, 647 F.3d 1218 (9th Cir. 2011) (admitting difficulty in applying traditional jurisdictional tests to cases which arise from purely digital causes of action).

in employment advertising and recruitment.[126] The defendants used Facebook to advertise vacancies to the public and used Facebook's customizable algorithms to only show the advertisement to individuals between the ages of 18 and 38.[127] T-Mobile and Amazon defend themselves by claiming that the plaintiffs had no desire to actually apply for the advertised job, and the age-targeting did not hinder their ability to compete for employment.[128] The court dismissed the claim with leave to amend due to lack of standing and personal jurisdiction.[129] The court found that the plaintiffs lacked standing because they failed to allege that they personally were denied an opportunity to apply for jobs.[130] The deficit of personal jurisdiction stems from the targeted advertisement lacking any geography; the online nature of the advertisement fails to establish any minimum contacts.[131]

Bradley's standing issue is unique because none of the plaintiffs applied for the positions advertised.[132] Although all were able and ready to apply, none had actually taken the step to do so. Although some courts have indicated they are open to such a low bar for standing, the precedential Supreme Court cases of *Northeastern*[133] and *Adarand*[134] that lay out the right of opportunity to compete are opportunities for contracts. The plaintiffs in those cases operated business that routinely sought out and performed contracts, and this routine practice created an

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[126] *Bradley v. T-Mobile US, Inc.,* No. 17-CV-07232-BLF, 2020 WL 1233924 (N.D. Cal. Mar. 13, 2020).
[127] Fifth Amended Complaint for Plaintiff at ¶ 3, *Bradley v. T-Mobile US, Inc.,* No. 17-CV-07232-BLF, 2020 WL 1233924 (N.D. Cal. Mar. 13, 2020).
[128] Defendants' Reply in Support of Motion to Dismiss Plaintiffs' Fifth Amended Complaint, *Bradley v. T-Mobile US, Inc.,* No. 17-CV-07232-BLF, 2020 WL 1233924 (N.D. Cal. Mar. 13, 2020).
[129] *Supra* at note 118, at *1.
[130] *Id*. at *9.
[131] *Id*. at *24.
[132] Fifth Amended Complaint, ¶ 59-69.
[133] The City of Jacksonville passed an ordinance requiring the city to set aside ten percent of its contract budget for minority businesses, and Northeastern sued to challenge the ordinance.
[134] A federal set-aside program provided incentive for any prime contractors who hired subcontractors controlled by minority individuals, and a contractor sued as their otherwise winning lowest bid was passed over because of that program.

inference that if the plaintiffs were ready and able to accept the contract, they would do so.[135] It is typical that an individual will only seek out a job best fitting to them and regard more factors than a contractor might in pursuing a government contract. To properly apply this ready and able requirement to employment, a plaintiff must show an inclination towards that job.[136]

There are two remedies to this issue of standing; the first is to plausibly allege that the plaintiff was actively seeking employment and applied for positions similar to the one the employer offered, and the second is to apply for the position challenged. The first remedy creates a stronger and more plausible foundation for a claim of a particularized and actual injury, since the standing requirement of a case under Article III requires such. An individual cannot bring a claim on behalf of an entire protected class and must plausibly allege that they were personally injured by the denial of information. By showing that the individual plaintiff would have applied for the position, beyond a mere statement in a legal complaint, would likely be sufficient to most courts to at least survive the pleading phase.

The second solution may seem to avoid a fight on advertising entirely and double down on employment practices. To an extent, this is true. As previously discussed, the law grows slower than technology. There is certainly an argument to be made that the discrimination in advertising is actionable. Many would shudder at the thought that an employer could stand at the corner and hand out fliers soliciting employment applications, but only to white men under the age of 40. The function of the AI is little different than that, but most courts are not prepared to dive into the digital world and unknown field of AI.

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[135] *See generally Northeastern*, 508 U.S. 656, 668 (1993).
[136] *Supra* at note 118, at *10.

The second issue is jurisdiction, a topic which haunts lawyers from their first days of law school. Establishing jurisdiction is a Herculean task in a digital era, but it is compounded in *Bradley.* Three plaintiffs of the four in *Bradley* are from outside the Northern District of California, with only Richard Haynie and the CWA residing in California. Further, the advertising campaign created by Amazon and T-Mobile and conducted by Facebook was international and lacked any specific geographic target. Here the deficit of *Bradley* comes from its nature as a class action. The claim is brought under the ADEA, a federal law, and establishes subject matter jurisdiction. A federal court would have personal jurisdiction in the state of Washington,[137] and suit could appropriately be brought there.[138] Likely for reasons of fiscal practicality, *Bradley* was brought in California because of the Northern District's favorable precedent and courts and because that is where the CWA resides, and one of the largest communications and media labor union in the US likely funded the plaintiff's action.[139] Were the plaintiffs to bring suit in the Western District Court of Washington, they would avoid this jurisdictional issue.

IV. Problems of Proving Liability

Suppose the plaintiffs in *Bradley* remedy their deficits and a prospective plaintiff in the hypothetical Amazon case could establish their prima facie case. The complaint is filed, and an obligatory motion to dismiss is survived. Next comes summary judgment, which ends near seventy-seven percent of employment discrimination cases.[140] Theories as to why so many cases

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[137] Both Amazon and T-Mobile are headquartered in Seattle. WA. WIKIPEDIA, THE FREE ENCYCLOPEDIA. en.wikipedia.org.
[138] Fed. R. Civ. P. 4(k)(1).
[139] COMMUNICATIONS WORKERS OF AMERICA, https://cwa-union.org/about.
[140] Hon. Denny Chin, *Summary Judgment in Employment Discrimination Cases: A Judge's Perspective*, 57 N.Y.L. Sch. L. Rev. 671, 673 (2013).

end at summary judgment vary from optimism that discrimination is on the decline, to the cynical belief that federal judges are hostile to employees bringing discrimination, and in the middle a pragmatic view that meritorious claims get settled.[141] All agree on one issue though; proving intent is hard.[142]

As previously mentioned, disparate treatment cases are the most common form of discrimination claim. Intent is a requirement of the complaint, and since open statements revealing unlawful discrimination are remarkably rare plaintiffs must prove intent circumstantially. Disparate impact claims fare little better despite not needing intent. Disparate impact requires proof that a system as a whole has a discriminatory effect, which is labor intensive in the best of times and often inconclusive. AI has the potential of flipping everything on its head. When an employer discriminates against an applicant, they often do their best to hide their shameful secret. A computer engraves its principle and puts it on the wall so that it never forgets. The grand question of this new frontier is how to find it.

a. Traditional Evidentiary Issues in Discrimination Cases

Although disparate treatment cases seek to prove intent and disparate impact cases seek to prove effect, they both find themselves climbing the same evidentiary mountains. The most glaring roadblock comes in the form of defining direct and circumstantial evidence.[143] Circumstantial evidence uses its common definition of evidence that supports drawing an inference of disputed fact, while direct evidence has only had definitions rejected by the

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[141] *See* Elizabeth M. Schneider, *The Changing Shape of Federal Civil Pretrial Practice: The Disparate Impact on Civil Rights and Employment Discrimination Cases*, 158 U. PA. L. REV. 517, 525–26 (2010).
[142] *See generally* Hon. Denny Chin*, Summary Judgment in Employment Discrimination Cases: A Judge's Perspective*, 57 N.Y.L. SCH. L. REV. 671, 673 (2013).
[143]*See* Michael J. Zimmer, *Chaos or Coherence: Individual Disparate Treatment Discrimination and the ADEA*, 51 MERCER L. REV. 693 (2000).

Supreme Court in an employment setting.[144] This is relevant to the burden-shifting frame work of *McDonald Douglas* and other burden-shifting schemes.[145] The nature of summary judgment exacerbates these issues since the nature of an employment discrimination claim is heavily contextual. Even though summary judgment views evidence in a light most favorable to the nonmoving party it inherently leads to the view of evidence in isolation and denies the cumulative and contextual weight of circumstantial evidence.[146]

Unique to disparate treatment cases is the proving of intent, a difficult and fickle thing to pin down. The appeal of the *McDonald Douglas* framework is that making the prima facie case creates a presumption of discrimination, and therefore intent. This proves to be poor medicine for the evidentiary ill since the employer then provides a non-discriminatory reason, shifting the burden back to the plaintiff to prove the reason was a pretext. The plaintiff finds themselves holding the burden to prove pretext, and thus, intent with no further means to shift the burden. This burden often proves too much for plaintiffs since there is little Supreme Court guidance as to how much evidence is sufficient to create a reasonable question for the jury, and lower courts follow a cascading buildup of precedent supporting a high bar.[147] As a matter of practice, this leads to judges often playing the role not as a gatekeeper of litigation but a single predisposed juror.

Disparate impact claims may not need to prove intent, but their own issues make up for this. The most obvious is the difficulty in making a prima facie case. While on paper the

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[144] *See* Michael J. Zimmer, *The Emerging Uniform Structure of Disparate Treatment Discrimination Litigation*, 30 GA. L. REV. 563 (1996).
[145] *See* Christopher Y. Chen, *Rethinking the Direct Evidence Requirement: A Suggested Approach in Analyzing Mixed-Motives Discrimination Claims*, 86 CORNELL L. REV. 899 (2001).
[146] *See* Michael J. Zimmer, *Slicing & Dicing of Individual Disparate Treatment Law*, 61 LA. L. REV. 577 (2001).
[147] *See generally* Eric S. Riester, *Making Sense of Pretext: An Analysis of Evidentiary Requirements for Summary Judgment Litigants in the Fifth Circuit in Light of Reeves v. Sanderson Plumbing Products, and A Proposal for Clarification,* 34 ST. MARY'S L.J. 261 (2002).

elements of a prima facie impact case seem lenient, the Supreme Court has held that a plaintiff is "responsible for isolating and identifying the specific employment practices that are allegedly responsible for any observed statistical disparities."[148] From there, the plaintiff must prove a correlation between the employment practices and the adverse effect and beat any defense an employer may raise about business relatedness of the practice and requirements.[149] Added to this comes the difficulty of obtaining statistical evidence of the employer's practice and the relevant labor market.[150]

b. Unique Evidentiary Issues in AI

AI has the potential to create entirely new frameworks for proving discrimination, because even in a disparate impact claim the AI would likely produce direct evidence of discrimination. An AI recruitment program is essentially a human resources agent that writes everything thought as a note, and meticulously writes out how it reaches a decision. Obtaining these notes hidden in the AI's code and logs would be incontrovertible evidence of discrimination. The lines of code that reveal a discriminatory intent are a philosopher's stone; a mythical object that can turn the weakest case into solid gold. Unfortunately, the AI writes these notes for its own purpose, not for a potential plaintiff and those meticulous notes read out as a never-ending sentence with far too many parentheses and not enough words.

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[148] *See Smith v. City of Jackson, Miss.*, 544 U.S. 228 (2005).
[149] Carla J. Rozycki, Emma J. Sullivan, *Employees Bringing Disparate-Impact Claims Under the Adea Continue to Face an Uphill Battle Despite the Supreme Court's Decisions in Smith v. City of Jackson and Meacham v. Knolls Atomic Power Laboratory*, 26 ABA J. LAB. & EMP. L. 1 (2010).
[150] *See generally* Carla J. Rozycki, Emma J. Sullivan, *Employees Bringing Disparate-Impact Claims Under the Adea Continue to Face an Uphill Battle Despite the Supreme Court's Decisions in Smith v. City of Jackson and Meacham v. Knolls Atomic Power Laboratory*, 26 ABA J. LAB. & EMP. L. 1 (2010).

Before an eager plaintiff begins their quest for the legend, they will have to pass through the gates of discovery. The Federal Rules of Civil Procedure outline the scope of discovery,[151] and case law fleshes out the rules. The recurring theme of AI in law is prevalent here as well, as the nature of AI proves difficult to fit within existing legal framework. AI are more often protected by secrecy than copyright law since copyright law does not adequately extend to AI and self-generated code.[152] Due to the importance of secrecy in AI development, employers and developers alike will fight tooth and nail to prevent any discovery into the code of an AI. Although Supreme Court precedent provides an edge for plaintiffs,[153] the actual practice of granting discovery requests and what can and cannot be discovered is "within the sound discretion of the trial court…"[154] How courts will treat discovery requests peering into the inner machinations of a program that has grown past the original programming of the developer is an educated guess every time a motion for discovery is made. The policy and legal arguments for strict discovery rules versus favorable treatment towards plaintiffs go both ways and are likely to result in cases within cases at the discovery stage.

Assuming a favorable outcome in a discovery request, attorneys and plaintiffs looking for gold in code had best be wary. The complicated and technical nature of AI could mean they spend immense resources and efforts looking for gold only to end up empty handed. Where traditional discrimination claims leave plaintiffs grasping for evidentiary straws, AI threatens to give plaintiffs too much. The very expectation of direct evidence may even make the traditional summary judgment wall impassable. Courts may expect that if an AI discriminates, there will be

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[151] Fed. R. Civ. P. 26(b).
[152] *See generally* Katherine B. Forrest, *Copyright Law and Artificial Intelligence: Emerging Issues*, 65 J. Copyright Soc'y U.S.A. 355 (2018).
[153] *Fed. Open Mkt. Comm. of Fed. Rsrv. Sys. v. Merrill*, 443 U.S. 340 (1979) (holding that there is no absolute and automatic privilege for trade secrets and other confidential commercial information).
[154] *Centurion Indus., Inc. v. Warren Steurer & Assocs.*, 665 F.2d 323, 326 (10th Cir. 1981).

clear and direct evidence in the code. Should a plaintiff fail to find it, courts and jurors alike may assume that to mean there is no discrimination. Plaintiffs may very well ask themselves if the search is worth the costs and the risk, choosing instead to establish AI discrimination through traditional means.

V. Conclusion

Our legal system operates much like an AI does. The federal and state constitutions are the original code that create our program. Legal minds encounter problems and write new rules to better equip themselves with future problems and learn from the experiences. The strength of our system comes from its adaptability. Much like an AI, we have encountered a new problem in the world of employment law. The algorithms, the laws, that currently exist for this problem are Title VII, the ADEA, and existing case law. Applying these laws to the new facts of AI discriminating against individuals generates an outcome familiar to our system. If an employer's facially neutral system has a disparate impact on a protected class, it is actionable under the law. If an employer intentionally discriminates against an individual due to their status as a protected class and it results in disparate treatment, it is actionable under the law.

AI is a powerful tool that is changing the world and revolutionizing the digital era, but it is a tool, nonetheless. AI should be treated as such in accordance with existing law to reach the desired and just outcome of protecting those within the scope of Title VII and the ADEA, and users of AI should be aware they are liable for the actions caused by their tools. Likewise, job applicants and their attorneys should be aware that although AI will change the legal landscape, many familiar obstacles will remain. Proving claims will remain an uphill battle, and *McDonald Douglas* will still appear in more briefs than it will not. No AI, not IBM's Watson nor HAL 9000, is powerful enough to change *McDonald Douglas*.