IN THE Supreme Court of the United States

ASHLEY MOODY, ATTORNEY GENERAL OF FLORIDA, et al., Petitioners,

v.

NETCHOICE, LLC, DBA NETCHOICE, et al., Respondents.

NETCHOICE, LLC, DBA NETCHOICE, et al., Petitioners,

v.

KEN PAXTON, ATTORNEY GENERAL OF TEXAS, Respondent.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURTS OF APPEALS FOR THE FIFTH AND ELEVENTH CIRCUITS

BRIEF FOR DEVELOPERS ALLIANCE AND SOFTWARE & INFORMATION INDUSTRY ASSOCIATION AS AMICI CURIAE IN SUPPORT OF NETCHOICE, LLC AND CCIA

SONAL N. MEHTA WILMER CUTLER PICKERING HALE AND DORR LLP 2600 El Camino Real, Ste. 400 WILMER CUTLER PICKERING Palo Alto, CA 94306

HANNAH E. GELBORT WILL C. DARIO WILMER CUTLER PICKERING HALE AND DORR LLP 60 State Street Boston, MA 02109

ARI HOLTZBLATT Counsel of Record ALLISON M. SCHULTZ HALE AND DORR LLP 2100 Pennsylvania Ave., NW Washington, DC 20037 (202) 663-6000 ari.holtzblatt@wilmerhale.com

TABLE OF CONTENTS

Page
TABLE OF AUTHORITIES iii
INTEREST OF AMICI CURIAE1
INTRODUCTION AND SUMMARY OF ARGUMENT2
ARGUMENT6
I. Software Developers Design Algorithms As Tools To Execute And Amplify A Website's Expression By Curating And Moderating Content Created By Others
A. Algorithms Operationalize A Website's Content Policies And Priorities
B. Websites Create Many Different Algorithms To Implement Myriad Content-Related Policies11
1. Websites deploy moderation algorithms to detect and remove content that violates their expressive standards11
2. Websites deploy prioritization and ranking algorithms to match content to interested users
3. Algorithms complement and facilitate websites' human moderation and curation efforts23
4. Developers refine websites' content prioritization, ranking, and moderation strategies and

TABLE OF CONTENTS—Continued

Page

algorithms to maintain the desired messaging25
II. THE FACT THAT WEBSITES IMPLEMENT THEIR EDITORIAL AND CURATORIAL DECISION MAKING THROUGH ALGORITHMS DOES NOT STRIP THEM OF FIRST
AMENDMENT PROTECTION28
A. The First Amendment Protects Editorial And Curatorial Decision Making28
B. The Same Protections Apply To Coded Algorithms Designed To Curate And Organize Content Created By Others
CONCLUSION

TABLE OF AUTHORITIES

CASES

Page(s)

Bartnicki v. Vopper, 532 U.S. 514 (2001)28
Hurley v. Irish-American Gay, Lesbian, & Bisexual Group of Boston, 515 U.S. 557 (1995)2, 5, 6, 23, 29, 30, 32, 34
Los Angeles v. Preferred Communications, Inc., 476 U.S. 488 (1986)29
Manhattan Community Access Corp. v. Hal- leck, 139 S. Ct. 1921 (2019)
Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974)5, 28, 29, 30, 32
Pacific Gas & Electric Co. v. Public Utilities Commission of California, 475 U.S. 1 (1986)
Rumsfeld v. Forum for Academic & Institu- tional Rights, Inc., 547 U.S. 47 (2006)
Seattle Times Co. v. Rhinehart, 467 U.S. 20 (1984)
Sorrell v. IMS Health Inc., 564 U.S. 552 (2011)
<i>Turner Broadcasting System, Inc.</i> v. <i>FCC</i> , 512 U.S. 622 (1994)29
Twitter, Inc. v. Taamneh, 598 U.S. 471 (2023)32, 33

STATUTORY PROVISIONS

Fla. Stat.	§501.2041	
Tex. Bus.	& Com. Code §120.051	25

OTHER AUTHORITIES

About, Etsy, https://www.etsy.com/about (visited Dec. 6, 2023)20, 21
Adult Nudity and Sexual Activity: Policy Details, Meta Transparency Center, https://transparency.fb.com/en-gb/poli- cies/community-standards/adult-nudity- sexual-activity/ (visited Dec. 6, 2023)14, 15
Anti-Defamation League, Sliding Through: Spreading Antisemitism on TikTok by Exploiting Moderation Gaps (Nov. 20, 2023), https://www.adl.org/resources/ blog/sliding-through-spreading-antisemi- tism-tiktok-exploiting-moderation-gaps27
BBC, Inputs and Outputs, https://www.bbc .co.uk/bitesize/topics/zs7s4wx/arti- cles/z7wckty#z9cybqt (visited Dec. 6, 2023)8
Bernal, Natasha, Facebook's Content Modera- tors Are Fighting Back, Wired (Nov. 6, 2021), https://www.wired.co.uk/article/face- book-content-moderators-ireland
Blazina, Carrie & Galen Stocking, <i>Key Facts</i> <i>About Parler</i> , Pew Research Center (Oct. 20, 2022), https://www.pewre- search.org/short-reads/2022/10/20/fast- facts-about-parler-as-kanye-west-report- edly-plans-acquisition-of-site/7

Page

Buckley, Nicole & Joseph S. Schafer, "Censor- ship-Free" Platforms: Evaluating Content Moderation Policies and Practice of Alternative Social Media, 4 For(e)Dialogue 1 (Feb. 3, 2022), https://foredialogue.pub- pub.org/pub/bsh5uhll/release/1
Carlson, Nicholas, <i>Pinterest CEO: Here's How</i> <i>We Became the Web's Next Big Thing</i> , Business Insider (Apr. 24, 2012), https://www.businessinsider.com/pinterest- founding-story-2012-4
Chowdhury, Nafia, Automated Content Moder- ation: A Primer, Stanford Cyber Policy Center Program on Platform Regulation (Mar. 19, 2022), https://cyber.fsi.stan- ford.edu/news/automated-content-modera- tion-primer
Darbinyan, Rem, <i>The Growing Role of AI</i> <i>in Content Moderation</i> , Forbes (June 14, 2022), https://www.forbes.com/ sites/forbestechcouncil/2022/06/14/the- growing-role-of-ai-in-content-modera- tion/?sh=40ccbb474a178, 9, 24
Desjardins, Jeff, <i>How Much Data Is Generated</i> <i>Each Day?</i> , World Economic Forum (Apr. 17, 2019), https://www.wefo- rum.org/agenda/2019/04/how-much-data-is- generated-each-day-cf4bddf29f/9

v

Facebook Community Standards, Meta Transparency Center, https://transpar- ency.fb.com/policies/community-standards/ (visited Dec. 6, 2023)
Farid, Hany, An Overview of Perceptual Hashing, J. Online Trust & Safety (2021), https://tsjournal.org/index.php/jots/arti cle/view/24/14
GIFCT's Hash-Sharing Database, Global Internet Forum to Counter Terrorism, https://gifct.org/hsdb/ (visited Dec. 6, 2023)12
Godtube, <i>About Us</i> , https://www.godtube.com/ about-godtube.html (visited Dec. 6, 2023)3
Godtube, <i>Terms Of Use</i> , https://www.god tube.com/terms-of-use.html (visited Dec. 6, 2023)
Goodrow, Cristos, On YouTube's Recommen- dation System, YouTube Official Blog (Sept. 15, 2021), https://blog.youtube/in side-youtube/on-youtubes-recommenda tion-system/20, 33
Google, Search Quality Rater Guidelines: An Overview, Google, https://services .google.com/fh/files/misc/hsw-sqrg.pdf (vis- ited Dec. 6, 2023)

Gorwa, Robert, et al., Algorithmic Content Moderation: Technical and Political Challenges in the Automation of Platform Governance, 7 Big Data & Soc'y 1 (2020)4, 11, 12, 17, 33
Hall, Mark, <i>Facebook</i> , Britannica, https:// www.britannica.com/topic/Facebook (up- dated Dec. 6, 2023)7
Heilweil, Rebecca, <i>Parler</i> , the "Free Speech" Social Network, Explained, Vox, https:// www.vox.com/recode/2020/11/24/21579357/ parler-app-trump-twitter-facebook-censor ship (updated Jan. 11, 2021)
Hirose, Alyssa, 2023 Instagram Algorithm Solved: How to Get Your Content Seen, Hootsuite Blog (Apr. 12, 2023), https:// blog.hootsuite.com/instagram-algorithm/26, 27
Hootsuite, https://www.hootsuite.com/ (visited Dec. 6, 2023)26
How Etsy Search Works, Etsy Help Center, https://help.etsy.com/hc/en-us/articles/ 115015745428-How-Etsy-Search-Works ?segment=selling (visited Dec. 6, 2023)21
Keller, Daphne, <i>What the Supreme Court Says</i> <i>Platforms Do</i> , Lawfare (Sept. 14, 2023), https://www.lawfaremedia.org/article/ what-the-supreme-court-says-platforms-do25

vii

Page

Merriam-Webster, https://www.merriam-web- ster.com/dictionary/algorithm (visited Dec. 6, 2023)
Meta, Case On Breast Cancer Symptoms And Nudity, https://transparency.fb.com/over sight/oversight-board-cases/breast-cancer- symptoms-nudity (updated June 12, 2023)15
Meta, Facebook Community Standards, https://transparency.fb.com/policies/com munity-standards/ (visited Dec. 6, 2023)3
Meta's Third-Party Fact-Checking Program, Meta, https://www.facebook.com/formedia/ mjp/programs/third-party-fact-checking/ (visited Dec. 6, 2023)10, 24
Mosseri, Adam, <i>New Features</i> , Instagram (Apr. 20, 2022), https://www.instagram. com/reel/Cck9Do_gOPH/?utm_source= ig_embed&utm_campaign=loading22
Newberry, Christina, 2023 TikTok Algorithm Explained + Tips to Go Viral, Hootsuite (Feb. 8, 2023), https://blog.hootsuite.com/ tiktok-algorithm/26
No, Your News Feed Is Not Limited to Posts From 26 Friends, Meta (Feb. 6, 2019), https://about.fb.com/news/2019/02/inside- feed-facebook-26-friends-algorithm-myth/22

viii

Notices on X and what they mean, X Help Center, https://help.twitter.com/en/rules- and-policies/notices-on-x (visited Dec. 6, 2023)
O'Connor, Jennifer F. & Emily Moxley, Our Approach to Responsible AI Innovation, YouTube Official Blog (Nov. 14, 2023), https://blog.youtube/inside-youtube/our-ap proach-to-responsible-ai-innovation/
Olafson, Karin, How to Use Pinterest for Busi- ness: 8 Strategies You Need To Know, Hootsuite (July 29, 2021), https://blog.hoot suite.com/how-to-use-pinterest-for-busi ness/
OpenAI Says AI Tools Can Be Effective in Content Moderation, Reuters (Aug. 15, 2023), https://www.reuters.com/technol ogy/openai-says-ai-tools-can-be-effective- content-moderation-2023-08-15/23, 24
Our Approach to Facebook Feed Ranking, Meta, https://transparency.fb.com/fea tures/ranking-and-content/ (updated Nov. 28, 2023)10, 19, 21
Our Approach to Policy Development and En- forcement Philosophy, X, https://help.twit ter.com/en/rules-and-policies/enforcement- philosophy (visited Dec. 6, 2023)
<i>Our Commitment</i> , BitChute, https://support. bitchute.com/policy/our-commitment/ (vis- ited Dec. 6, 2023)

ix

Proactive Rate, Meta Transparency Center, https://transparency.fb.com/policies/im proving/proactive-rate-metric/ (updated Feb. 22, 2023)
RoBERTa: An optimized method for pretrain- ing self-supervised NLP systems, Meta (July 29, 2019), https://ai.meta.com/blog/ roberta-an-optimized-method-for-pretrain ing-self-supervised-nlp-systems/
Samanta, Priyanka & Shweta Jain, Analysis of Perceptual Hashing Algorithms in Image Manipulation Detection, 185 Procedia Comp. Sci. 203 (2021)11
Search, Google, https://www.google.com/ search/howsearchworks/how-search- works/ranking-results/10
Singhal, Mohit, et al., SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice (Mar. 2023), https://arxiv.org/pdf/2206. 14855.pdf9, 10, 11, 16
Steinberg, Kayla, People Are Using Coded Language To Avoid Social Media Moderation. Is It Working?, PolitiFact (Nov. 4 2021), https://www.politifact.com/ article/2021/nov/04/people-are-using-coded- language-avoid-social-media/27

х

Page

 Tariq, Muhammad U., et al., A Review of the Gaps and Opportunities of Nudity and Skin Detection Algorithmic Research for the Purpose of Combating Adolescent Sex- ting Behaviors, in Human-Computer Inter- action; Design Practice in Contemporary Societies, vol. 11568 (M. Kurosu ed., June 27, 2019), https://link.springer.com/chap ter/10.1007/978-3-030-22636-7_614
Tomasik, Emily & Galen Stocking, <i>Key Facts</i> <i>About BitChute</i> , Pew Research Center (Feb. 17, 2023), https://www.pewresearch. org/short-reads/2023/02/17/key-facts-about- bitchute/
<i>Transparency Report</i> , Pinterest, https://policy. pinterest.com/en/transparency-report (vis- ited Dec. 6, 2023)
Truth, Community Guidelines, https://help. truthsocial.com/community-guidelines- page/ (visited Dec. 6, 2023)
<i>Types of Content We Demote</i> , Meta, https:// transparency.fb.com/features/approach-to- ranking/types-of-content-we-demote (up- dated Oct. 16, 2023)
Using AI to Detect COVID-19 Misinformation and Exploitative Content, Meta (May 12, 2020), https://ai.meta.com/blog/using-ai-to- detect-covid-19-misinformation-and-exploi tative-content/

xi

Weimann, Gabriel & Natalie Masri,
TikTok's Spiral of Antisemitism,
2 Journalism & Media 697 (2021)27
What are Convolutional Neural Networks?,
IBM, https://www.ibm.com/topics/convolu
tional-neural-networks (visited Dec. 6,
2023)
What is the Hash Sharing Database?, Global
Internet Forum to Counter Terrorism,
https://gifct.org/?faqs=what-is-the-hash-
sharing-database (visited Dec. 6, 2023)13

IN THE Supreme Court of the United States

No. 22-277

ASHLEY MOODY, ATTORNEY GENERAL OF FLORIDA, et al., Petitioners,

v.

NETCHOICE, LLC, DBA NETCHOICE, et al., Respondents.

No. 22-555

NETCHOICE, LLC, DBA NETCHOICE, et al., Petitioners,

v.

KEN PAXTON, ATTORNEY GENERAL OF TEXAS Respondent.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURTS OF APPEALS FOR THE FIFTH AND ELEVENTH CIRCUITS

BRIEF FOR DEVELOPERS ALLIANCE AND SOFTWARE &INFORMATION INDUSTRY ASSOCIATION AS AMICI CURIAE IN SUPPORT OF NETCHOICE, LLC AND CCIA

INTEREST OF AMICI CURIAE¹

The Developers Alliance is a non-profit corporation that advocates for software developers. Its corporate

 $^{^1}$ No counsel for a party authored this brief in whole or in part, and no entity or person, other than amicus curiae, its members, and

mission is to "[a]dvocate on behalf of developers and the companies that depend on them, support the industry's continued growth, and promote innovation." As a group created by and for software developers, Developers Alliance recognizes that software created by developers reflects the judgments, decision making, and creative thinking of those developers. Alliance members include industry leaders in consumer, enterprise, industrial, and emerging software, and a global network of more than 75,000 developers.

The Software and Information Industry Association ("SIIA") is the principal trade association for those in the business of information. SIIA's membership includes more than 500 software companies, platforms, data and analytics firms, and digital publishers that serve nearly every segment of society, including business, education, government, healthcare, and consumers. It is dedicated to creating a healthy environment for the creation, dissemination, and productive use of information. SIIA protects the rights of its members to use software as a tool for the dissemination of information.

INTRODUCTION AND SUMMARY OF ARGUMENT

Publishing or disseminating speech created by others inherently requires deciding what content is "worthy of presentation" and to whom, *Hurley* v. *Irish-American Gay, Lesbian & Bisexual Group of Boston*, 515 U.S. 557, 575 (1995). Newspapers highlight stories they think are interesting by placing them on the front page and bury less interesting stories by putting them later in the paper or leaving them on the cutting room floor. A Catholic

its counsel, made a monetary contribution intended to fund the preparation or submission of this brief.

bookstore might promote religious-oriented books in its front window, while a children's bookstore typically carries only books appropriate for minors. And a sportsloving newsstand usually allocates prime location to sports magazines or newspapers devoted to local teams. Each of these choices expresses a view about the nature of the newspaper, bookstore, or newsstand.

Websites likewise express themselves through their choices about what content to display and how-and that remains true, even when they use algorithms, rather than direct human review, to carry out those decisions. When these websites disseminate speech to their users. they convey a message about the type of speech they find acceptable and about the kind of community they hope to foster. To shape those messages, each website has various content-related rules and policies that reflect each website's expressive vision. Truth Social prohibits content that could "interfere with [its] goal of providing a welcoming platform," including content that violates a person's privacy rights.² And to foster a "safe place" for "authentic" communication, Facebook prohibits hate speech, violent content, harassment, and misinformation.³ Godtube, a "Christian video sharing website,"⁴ prohibits "name calling," "vulgar terms," or "sexually suggestive" content in order to create "the safest

² Truth, *Community Guidelines*, https://help.truthsocial.com/community-guidelines-page/ (visited Dec. 6, 2023).

³ Meta, *Facebook Community Standards*, https://transparency.fb.com/policies/community-standards/ (visited Dec. 6, 2023).

⁴Godtube, *About Us*, https://www.godtube.com/about-godtube.html (visited Dec. 6, 2023).

and most Christian values sensitive community environment possible." $^{\!\!\!^{75}}$

Over the years, as websites have grown, the processes through which they enforce their community standards have changed, but the resulting expressions of each website's values and priorities have not. In the early days of the Internet, simplistic message boards were monitored by human administrators who reviewed each post added to the board.⁶ Posts that failed to comply with the board's community standards—because, for example, they contained inappropriate language or concerned topics other than those designated for the board—were removed. Administrators thus culled and curated speech created by others to ensure an overall message consistent with the community's standards and priorities.

Today, those simplistic message boards have become the global websites now used by nearly 5 billion people worldwide. Each website still has its own rules and community standards, but the incredible volume of content shared each day makes human review of each new post impossible. To implement their rules and standards at the scale demanded by the Internet today, the people who administer those websites have created complex algorithms to translate their policies into code that can be executed by computers. By determining in advance how to identify content that violates website terms and should be removed or demoted, or content

⁵ Godtube, *Terms Of Use*, https://www.godtube.com/terms-of-use.html (visited Dec. 6, 2023).

⁶ See Gorwa et al., Algorithmic Content Moderation: Technical and Political Challenges in the Automation of Platform Governance, 7 Big Data & Soc'y 1, 2 (2020).

that the website wants to highlight for particular users, software developers operationalize technology-neutral human editorial decisions. Algorithms thus incorporate the rules and decision making needed to implement human content judgments.

Texas and Florida contend that the curation and dissemination of speech online is not expressive and therefore does not trigger First Amendment protections. No. 22-277 Pet. 18-22; No. 22-555 Opp. 18-20. Specifically, in its supplemental brief concerning certiorari, Texas contends that such content curation and moderation cannot be expressive because websites use algorithms, rather than human reviewers, to implement their editorial choices. No. 22-555 Texas Supp. Opp. 5. But the use of algorithms to operationalize website rules and standards does not displace human decision making. Rather, algorithms are tools for implementing human decisions. Computers can only do that which they are instructed, and so any content-moderation action taken by a computer reflects the editorial objectives of its human administrator, whether that is by removing certain specifically identifiable content or looking for patterns to statistically identify content likely violative of the websites' rules. The fact that content curation and moderation decisions are now implemented by algorithms does not sap those decisions of their expressive nature.

As this Court has long recognized, the "exercise of editorial control and judgment" over the speech or expression of others is protected by the First Amendment. *Miami Herald Publ'g Co.* v. *Tornillo*, 418 U.S. 241, 258 (1974). And that is true even where the resulting "edited compilation of speech generated by other persons" does not yield "a narrow, succinctly articulable message." *Hurley*, 515 U.S. at 569-570. It is simply the "deci[sion] to exclude" or include particular messages that triggers "the right [of] a private speaker to shape its expression." *Id.* at 574. As tools for implementing human editorial judgments at scale, the fact that algorithms implement most content moderation actions does not detract from the First Amendment protections afforded to the editorial and curatorial judgments reflected in and carried out by those algorithms.

Algorithms are the modern equivalent of an editor, a red pen, and a layout mockup all rolled into one. They implement decisions regarding what content should be distributed, what content should not be distributed, and how the content should be displayed to users. To enable content moderation and curation at the scale required by social media, those decisions are made in advance and applied automatically as new content is created and shared, but the decisions themselves are no less human than the red strikethrough on a newspaper mockup. Thus, laws—like the Texas and Florida laws here at issue-that restrict whether and how websites may moderate content implicate the websites' First Amendment rights, regardless of whether those moderation decisions are generally carried out through algorithms rather than hands-on human review.

ARGUMENT

I. SOFTWARE DEVELOPERS DESIGN ALGORITHMS AS TOOLS TO EXECUTE AND AMPLIFY A WEBSITE'S EX-PRESSION BY CURATING AND MODERATING CONTENT CREATED BY OTHERS

A. Algorithms Operationalize A Website's Content Policies And Priorities

Websites are created for different expressive purposes and are geared toward different audiences. Facebook, for example, launched in 2004 as a social network to connect friends within discrete college communities; by 2021 it had nearly 3 billion users worldwide.⁷ Pinterest entered the scene in 2010 as a site to share beautiful images, recipes, and creative inspiration.⁸ Parler launched in 2018 as an alternative to more traditional websites like Twitter and Facebook and promoted itself as a bastion of free speech.⁹

As purveyors of speech created by others, websites communicate these expressive visions—regarding what speech they find acceptable and the kinds of communities they hope to foster—through their curation of thirdparty content. Each website establishes its own content policies and priorities to guide the dissemination of speech. These policies and priorities are as diverse as the websites that created them and often evolve as the websites do. Some "alternative" websites' expressive identities turn on the fact that their content policies tolerate significantly more content than more traditional websites.¹⁰ Others prohibit or restrict violent,

⁷ Hall, *Facebook*, Britannica, https://www.britannica.com/ topic/Facebook (updated Dec. 6, 2023).

⁸ Olafson, How to Use Pinterest for Business: 8 Strategies You Need To Know, Hootsuite (July 29, 2021), https://blog.hootsuite.com/how-to-use-pinterest-for-business/; Carlson, Pinterest CEO: Here's How We Became the Web's Next Big Thing, Business Insider (Apr. 24, 2012), https://www.businessinsider.com/pinterestfounding-story-2012-4.

⁹ Heilweil, Parler, the "Free Speech" Social Network, Explained, Vox, https://www.vox.com/recode/2020/11/24/21579357/ parler-app-trump-twitter-facebook-censorship (updated Jan. 11, 2021).

¹⁰ Blazina & Stocking, *Key Facts About Parler*, Pew Research Center (Oct. 20, 2022), https://www.pewresearch.org/short-reads/

harassing, false, or misleading information in order to create environments for safe expression.

Websites use algorithms to implement their content-related policies. An algorithm is a "step-by-step procedure for solving a problem or accomplishing some end."¹¹ Coded algorithms must be incredibly precise, telling computers exactly what to do, in what order, in response to very specifically defined inputs. That is a herculean task that requires significant iteration and improvement. Every action that is taken by a computer, including every response to any input that is provided, is built into the computer's code during programming and is a function of the instructions that are embodied in that code.¹²

Given the volume of content posted daily to socialmedia websites, algorithms are the only feasible way for websites to implement their editorial judgments. In 2022, online communications websites collectively had 4.62 billion active users worldwide, a 10% increase from the previous year.¹³ By 2025, "463 exabytes of data will be created each day globally"—the "equivalent of

^{2022/10/20/}fast-facts-about-parler-as-kanye-west-reportedly-plans-acquisition-of-site/.

¹¹ Merriam-Webster, *Algorithm*, https://www.merriam-webster.com/dictionary/algorithm (visited Dec. 6, 2023).

¹² BBC, *Inputs and Outputs*, https://www.bbc.co.uk/bitesize/ topics/zs7s4wx/articles/z7wckty#z9cybqt (visited Dec. 6, 2023).

¹³ Darbinyan, *The Growing Role of AI in Content Moderation*, Forbes (June 14, 2022), https://www.forbes.com/sites/forbestechcouncil/2022/06/14/the-growing-role-of-ai-in-content-moderation/?sh=40ccbb474a17.

212,765,957 DVDs per day."¹⁴ As of February 2020, users uploaded around 500 hours of video to YouTube each minute.¹⁵ It would be impossible for human moderators alone to review, assess, and curate the "huge surge of user-generated content" that has emerged.¹⁶

When the operators of a website decide what kinds of content to promote, demote, remove, or factcheck, they turn to their software developers to make that happen. That process is shaped by the creativity of the developer. Any number of developers given the same problem to address will create the same number of diverse solutions; each might achieve similar results, but will do so in different ways, using different inputs and different sequences of operations.

Software developers have numerous tools at their disposal to shape the websites' content through pre-programed methods of moderation and curation. Developers create "automated algorithms, which include heuristic-based and rule-based techniques as well as sophisticated machine learning-based models."¹⁷ These algorithms and models operate based on inputs that are selected by developers and assigned relative weights

¹⁴ Desjardins, *How Much Data Is Generated Each Day?*, World Economic Forum (Apr. 17, 2019), https://www.weforum.org/ agenda/2019/04/how-much-data-is-generated-each-day-cf4bddf29f/.

¹⁵ Darbinyan, *The Growing Role of AI in Content Moderation*, supra n.13.

¹⁶ Id.

¹⁷ Singhal et al., SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice 2 (Mar. 2023), https://arxiv.org/pdf/2206.14855.pdf.

(degrees of influence on the result), depending on the context and the human judgments they are implementing. 18

For example, algorithms implement decisions regarding which content should be (1) featured prominently, (2) demoted so its distribution is reduced, (3) restricted to certain users based on their age, (4) flagged for further review by human moderators, (5) tagged with certain flags or warnings to other users, (6) immediately removed from the website, or (7) followed by a warning to the user who generated the content or his suspension or expulsion from the website.¹⁹ Each of these methods of moderation shapes the content available and accessible on a website, selecting and prioritizing the content most relevant to particular users and enforcing a website's expressive value judgments around topics including safety, violence, nudity, or harassment.

¹⁸ See Search, Google, https://www.google.com/search/ howsearchworks/how-search-works/ranking-results/.

¹⁹ Types of Content We Demote, Meta, https://transparency. fb.com/features/approach-to-ranking/types-of-content-we-demote (updated Oct. 16, 2023); Our Approach to Facebook Feed Ranking, Meta, https://transparency.fb.com/features/ranking-and-content/ (updated Nov. 28, 2023); Meta's Third-Party Fact-Checking Program, Meta, https://www.facebook.com/formedia/mjp/programs/ third-party-fact-checking/ (visited Dec. 6, 2023); Facebook Community Standards, Meta Transparency Center, https://transparency.fb.com/policies/community-standards/ (visited Dec. 6, 2023); Notices on X and what they mean, X Help Center, https://help.twitter.com/en/rules-and-policies/notices-on-x (visited Dec. 6, 2023); Singhal et al., SoK: Content Moderation in Social Media, supra n.17, at 3 (discussing "hard" versus "soft" moderation approaches).

B. Websites Create Many Different Algorithms To Implement Myriad Content-Related Policies

1. Websites deploy moderation algorithms to detect and remove content that violates their expressive standards

Websites enact community standards that specify certain types of content that they will not feature because it contradicts the website's values or expressive vision. For example, numerous websites prohibit graphic violent content, support of terrorism, hate speech, explicit sexual content, nudity, and false or misleading information. To effectuate these prohibitions, websites deploy content moderation algorithms.

For example, websites rely heavily on algorithms to implement rules against pornographic images, nudity, graphic violence, and hateful content. Some deploy perceptual hashing to automatically detect and block such content.²⁰ Perceptual hashing is a family of fingerprinting algorithms that generate content-based hashes of various forms of multimedia.²¹ Hashes can match identical images by converting each image into a "hash"—"a string of data meant to uniquely identify the underlying content"—and then comparing the hash "against a large table of existing hashes to see if it matches any of them."²² These algorithms can be used to detect

²⁰ Singhal et al., SoK: Content Moderation in Social Media, supra n.17, at 3.

²¹ Samanta & Jain, Analysis of Perceptual Hashing Algorithms in Image Manipulation Detection, 185 Procedia Comp. Sci. 203, 203 (2021).

²² Gorwa et al., 7 Big Data & Soc'y at 4.

redundant images, perform reverse image searches, and flag or filter known inappropriate imagery.

Perceptual hashing plays a critical role in effectuating Facebook's refusal to sponsor or disseminate videos of violence and hate. During the 2019 terrorist attack on two mosques in Christchurch, New Zealand, the terrorist shared video of the attack in real time using Facebook's live-stream feature.²³ Facebook quickly removed the original; fewer than 200 users ended up viewing it.²⁴ But users had already made copies—some with slight alterations—and reuploaded them to Facebook and other websites.²⁵ Facebook deployed its hashing technology to recognize and automatically block some 1.2 million of the 1.5 million copies users attempted to reupload.²⁶

Facebook, Google, X (formerly Twitter), and Microsoft created the Global Internet Forum to Counter Terrorism (GIFCT), collaborating on a "Hash-Sharing Database" of terrorist content that can be used to deploy perpetual hashing algorithms to sweep their websites for abusive content and remove it.²⁷ Even with a shared database of potentially harmful or problematic content, however, each member website is free to utilize the database's contents as it sees fit to execute its unique expressive goals. Each member website, "determines its

²⁷ *GIFCT's Hash-Sharing Database*, Global Internet Forum to Counter Terrorism, https://gifct.org/hsdb/ (visited Dec. 6, 2023).

²³ Farid, An Overview of Perceptual Hashing, J. Online Trust & Safety 1-2 (2021), https://tsjournal.org/index.php/jots/article/view/24/14.

²⁴ *Id*.

²⁵ Gorwa et al., 7 Big Data & Soc'y at 1.

 $^{^{26}}$ Id. at 1-2.

use of and engagement with the database, depending on (among other things) their own terms of service, how their platform operates, and how they utilize technical and human resources."²⁸

Pinterest—a website on which users can share and save image "Pins"—has been a member of GIFCT since 2019.²⁹ Its "mission ... to bring everyone the inspiration to create a life they love" and to "foster[] ... positive and inspirational ideas" informs its content moderation policy and algorithms.³⁰ For example, Pinterest employs algorithms to remove, among other things, "political ads" and accounts that support extremists and terrorist organizations.³¹ Pinterest's "machine learning models assign scores to each image added" to the website and, "[u]sing those scores, [its] automated tools can then apply the same enforcement decision to other Pins containing the same images."³²

Many websites' community guidelines also prohibit certain forms of nudity, which they consider discordant with their expressive purposes. Therefore, in addition to hashes, websites deploy other types of algorithms to detect and block nudity. For example, algorithms can calculate the percentage of bare skin in an image as a

 32 Id.

²⁸ What is the Hash Sharing Database?, Global Internet Forum to Counter Terrorism, https://gifct.org/?faqs=what-is-the-hash-sharing-database (visited Dec. 6, 2023).

²⁹ Transparency Report, Pinterest, https://policy.pinterest.com/ en/transparency-report (visited Dec. 6, 2023).

 $^{^{30}}$ *Id*.

³¹ *Id*.

way to detect images with inappropriate nudity.³³ Between April and June 2023 alone, Facebook took action on 51.2 million pieces of content containing nudity and sexual activity that violated its content policies.³⁴ Using a combination of algorithmic machine learning and human review, Facebook found and took action on 93.8% of that violative content on its own, even before users reported it.³⁵ And Facebook's "nudity policies"—and the algorithms that implement them—"have become more nuanced over time" to reflect its evolving editorial judgments.³⁶ Facebook now acknowledges that "nudity can be shared for a variety of reasons, including as a form of protest, to raise awareness about a cause, or for educational or medical reasons."³⁷ Facebook therefore "restrict[s] some images of female breasts that include the nipple," but allows images that "depict[] acts of protest, women actively engaged in breast-feeding and photos of

³³ Tariq et al., A Review of the Gaps and Opportunities of Nudity and Skin Detection Algorithmic Research for the Purpose of Combating Adolescent Sexting Behaviors, in Human-Computer Interaction; Design Practice in Contemporary Societies, vol. 11568 (M. Kurosu ed., June 27, 2019), https://link.springer.com/chapter/10.1007/978-3-030-22636-7_6.

³⁴ *Id*.

³⁵ *Id*; *Proactive Rate*, Meta Transparency Center, https://transparency.fb.com/policies/improving/proactive-rate-met-ric/ (updated Feb. 22, 2023).

³⁶ Adult Nudity and Sexual Activity: Policy Details, Meta Transparency Center, https://transparency.fb.com/en-gb/policies/community-standards/adult-nudity-sexual-activity/ (visited Dec. 6, 2023).

³⁷ *Id*.

post-mastectomy scarring."³⁸ To put that policy change into practice, Meta has worked to make its "machine learning models better at detecting the kinds of nudity [it] do[es] allow."³⁹ It is unclear whether these sensible policies that treat nudity differently based on context would survive S.B. 7072's requirement that covered websites "apply censorship ... standards in a consistent manner"⁴⁰ or HB20's prohibition against "censor[ing]" content "based on ... the viewpoint represented in the user's expression or another person's expression."⁴¹

Some websites have deemed misleading and false information—particularly regarding certain topics such as COVID-19 and election integrity—violative of their content policies. Such websites use algorithms to limit the distribution of such misleading and false information. This process generally begins with a human reviewer identifying specific information or content as false or misleading. A website's developers then create an algorithm that can identify and flag near duplicates of the false or misleading content. Use of such an algorithm allows fact-checking to occur at a scale that would be impossible with human review alone. For example, to detect misinformation, Meta has utilized SimSearch-Net++, a convolutional neural network⁴²-based model

³⁸ Id.

³⁹ Meta, *Case On Breast Cancer Symptoms And Nudity*, https://transparency.fb.com/oversight/oversight-board-cases/breastcancer-symptoms-nudity (updated June 12, 2023).

⁴⁰ Fla. Stat. §501.2041(2)(b).

⁴¹ Tex. Civ. Prac. & Rem. Code §143A.002(a)(2).

⁴² Convolutional neural networks are a class of machine learning algorithms that "are more often utilized for classification and computer vision tasks ... leveraging principles from linear algebra,

built specifically to detect near-exact duplicates of known misinformation.⁴³ During the height of the COVID-19 pandemic, Meta made it a priority to develop algorithms "to take COVID-19-related material [its] fact-checking partners have flagged as misinformation and then detect copies when someone tries to share them."⁴⁴ Through these efforts, Meta minimized the risk that it would express misleading or false messages about COVID-19.

In contrast, other websites have intentionally adopted content moderation policies that are more permissive of speech that other sites deem misleading or false. Websites like Parler, BitChute, Gab, and Gettr "have attempted to market themselves as unfettered, unmoderated areas which prioriti[z]e unlimited free speech."⁴⁵ Parler and BitChute, for example, did not implement content policies regarding election-related or health-related misinformation.⁴⁶ Similarly, X is more

specifically matrix multiplication, to identify patterns within an image." What are Convolutional Neural Networks?, IBM, https://www.ibm.com/topics/convolutional-neural-networks (visited Dec. 6, 2023).

⁴³ Using AI to Detect COVID-19 Misinformation and Exploitative Content, Meta (May 12, 2020), https://ai.meta.com/blog/usingai-to-detect-covid-19-misinformation-and-exploitative-content/; Singhal et al., SoK: Content Moderation in Social Media, supra n.17, at 3.

⁴⁴ Using AI to Detect COVID-19 Misinformation and Exploitative Content, supra n.43.

⁴⁵ Buckley & Schafer, "Censorship-Free" Platforms: Evaluating Content Moderation Policies and Practice of Alternative Social Media 4 For(e)Dialogue 7 (Feb. 3, 2022), https://foredialogue.pubpub.org/pub/bsh5uhll/release/1.

⁴⁶ *Id.* at 7, 10, 13.

tolerant of certain types of content, preferring to "promote[] counterspeech" that "presents facts to correct misstatements" or "denounces hateful or dangerous speech," rather than removing such speech.⁴⁷ BitChute, a video-sharing site, has stated that it is "committed to giving the people the power to choose which content is more prominent," so "the site and background features are designed" to allow viewers to "decide through objective criteria such as views, likes, and subscriptions which creators are featured most prominently across BitChute."⁴⁸

Some websites' content policies prohibit hate speech. To root out novel hate speech on such websites, software developers have created algorithms and models capable of evaluating new content that "has no corresponding previous version in a database" to determine whether it violates the website's values and community standards.⁴⁹ They employ pre-trained natural language processing models that "assess[] a word's position in relation to all the other words that usually appear around it, thereby providing more contextual nuance" in predicting whether it contains hate speech or other offensive content.⁵⁰ These models are trained with massive

⁵⁰ Chowdhury, Automated Content Moderation: A Primer, Stanford Cyber Policy Center Program on Platform Regulation

⁴⁷ Our Approach to Policy Development and Enforcement Philosophy, X, https://help.twitter.com/en/rules-and-policies/enforcement-philosophy (visited Dec. 6, 2023).

⁴⁸ Our Commitment, BitChute, https://support.bitchute.com/ policy/our-commitment/ (visited Dec. 6, 2023); see Tomasik & Stocking, Key Facts About BitChute, Pew Research Center (Feb. 17, 2023), https://www.pewresearch.org/short-reads/2023/02/17/keyfacts-about-bitchute/.

⁴⁹ Gorwa et al., 7 Big Data & Soc'y at 5

amounts of text to compute the relationships between words and phrases in an effort to extract patterns and craft probabilities about how input language relates to language from their training data.

The fact that some natural language processing models and convolutional neural networks utilize artificial intelligence and machine learning to assess and moderate content does not render their moderation decisions any less expressive. In employing these tools, websites' engineers code them to achieve the website's specific expressive goals, select the datasets on which they are trained, determine in which situations to deploy them, pair them with human moderation when appropriate, and "develop guardrails that will prevent [their] AI tools" from straying from their intended purposes.⁵¹ Moreover, websites monitor the work of their AI tools and continually finetune their coding to ensure they are executing the website's expressive intent.

Websites deploy all of these algorithmic tools to effectuate their content policies and ensure that the content they disseminate—woven together through their curation and organization of immense quantities of thirdparty content—remains true to their messaging goals.

⁽Mar. 19, 2022), https://cyber.fsi.stanford.edu/news/automated-content-moderation-primer; *RoBERTa: An optimized method for pretraining self-supervised NLP systems*, Meta (Jul. 29, 2019), https://ai.meta.com/blog/roberta-an-optimized-method-for-pretraining-self-supervised-nlp-systems/.

⁵¹ O'Connor & Moxley, *Our Approach to Responsible AI Innovation*, YouTube Official Blog (Nov. 14, 2023), https://blog.youtube/ inside-youtube/our-approach-to-responsible-ai-innovation/.

2. Websites deploy prioritization and ranking algorithms to match content to interested users

Newspapers and magazines make fundamental editorial decisions about what stories to feature on the front page or cover, what advertisements to run in what markets, and what news should run only in a local edition of the paper. Social media websites make the same types of decisions and deploy algorithms to carry them out over massive quantities of content. In the same way that certain publications prioritize particular stories, websites use algorithms to prioritize or rank content created by others so that website users are more likely to find and view it. These decisions reflect the website's judgment about what kind of content is most important whether that is content that is new, from particular social groups, or relevant to a particular topic.

In most cases, the signals that drive websites' recommendation, prioritization, and ranking decisions which are effectuated through algorithms—are thirdparty inputs including user ratings, a user's browsing and content-access history, users designated as friends, or users with similar engagement with the site.⁵² Algorithms also sometimes take into account what content is new or popular across a site's community generally.⁵³ The operators of each website exercise their own subjective value judgments of what is worthy of presentation by deciding (1) which inputs or signals should factor into its algorithm, (2) how much weight should be given to each input or signal, and (3) how the algorithm should

 ⁵² Our Approach to Facebook Feed Ranking, supra n.19.
 ⁵³ Id.

guide and organize what content is displayed as well as where, how, and to whom that content is displayed.

For example, YouTube has the expressive goal of "connect[ing] billions of people around the world to content that uniquely inspires, teaches, and entertains."⁵⁴ YouTube seeks to "recommend content tailored to [users'] specific interests," and has rejected the alternative approach of "rank[ing] videos based on popularity" alone.⁵⁵ In practice, YouTube's algorithm achieves these expressive goals by suggesting additional videos for users to watch.⁵⁶ The video suggestions are based on metadata reflecting the user's previous engagement (including clicks, watchtime, sharing, likes, dislikes, and survey responses) as well as what interested other users who previously watched similar videos, among other inputs.⁵⁷ Those algorithms reflect the website's curatorial decision to prioritize "accurately predicting the videos [users] want to watch"⁵⁸ rather than highlighting, for example, new content or content from or about a user's geographic location.

Etsy, in turn, is a "global marketplace" comprised of "real people connecting over special goods."⁵⁹ It is a website designed to "empower[] sellers" of those unique

⁵⁴ Goodrow, On YouTube's Recommendation System, YouTube Official Blog (Sept. 15, 2021), https://blog.youtube/insideyoutube/on-youtubes-recommendation-system/.

⁵⁵ Id.

⁵⁶ Id.

⁵⁷ Id.

⁵⁸ Id.

⁵⁹ About, Etsy, https://www.etsy.com/about (visited Dec. 6, 2023).

goods "to do what they love and help[] buyers find what they love."⁶⁰ Etsy's search algorithm—a type of ranking algorithm—is the key to helping those buyers locate those goods they love.⁶¹ It therefore takes into account numerous factors such as the degree of match between buyers' search terms and goods' listing tags and titles; "attributes" the seller has associated with the item for sale; listing quality; recency of listing or relisting of items for sale; and geographic proximity of the seller to the buyer.⁶² Because Etsy "want[s] buyers to have a great experience when they purchase from a seller," its search recommendation algorithm prioritizes sellers with strong "record[s] of customer service" and those that are "in good standing according to Etsy's policies."⁶³ Etsy has designed its search algorithm to promote the types of buyer-seller interactions it deems valuable and aligned with its values and mission.

Facebook's News Feed uses distinct prioritization or ranking tactics to collect and prominently feature "content that is most valuable to [users]."⁶⁴ The ranking is based on users' past engagement, the engagement of others in their networks, generally trending content, and other factors. If a user "frequently trade[s] comments with a friend, their posts are more likely to be shown higher in [the user's] News Feed than posts from

⁶⁰ Id.

⁶¹ How Etsy Search Works, Etsy Help Center, https://help.etsy.com/hc/en-us/articles/115015745428-How-Etsy-Search-Works?segment=selling (visited Dec. 6, 2023).

⁶² Id.

⁶³ Id.

⁶⁴ Our Approach to Facebook Feed Ranking, supra n.19.

someone [that user] never interact[s] with."⁶⁵ Facebook's News Feed algorithms also "prioritize posts that are predicted to spark conversations among people."⁶⁶ For example, at times the algorithm has prioritized live videos over regular videos because live videos "tend to lead to more discussions."⁶⁷ Like the modern day front page of a newspaper, prioritization and ranking algorithms cluster information in which users may be interested in places where it will catch their attention.

Instagram has explicitly tweaked its ranking algorithm to reflect and advance its expressive values and goals. In April 2022, Instagram's CEO Adam Mosseri explained that because "[c]reators" and "people expressing themselves [are] the heartbeat of Instagram," it had altered its algorithm in a way that was "specifically focused on the idea of originality."⁶⁸ Its updated ranking algorithm honors the idea that "if you create something from scratch, you should get more credit than if you are resharing something that you found from someone else," assigning more "value [to] original content" as "compared to reposted content."⁶⁹

Websites employ prioritization and ranking tools to create sites that embody their expressive visions, relay

⁶⁵ No, Your News Feed Is Not Limited to Posts From 26 Friends, Meta (Feb. 6, 2019), https://about.fb.com/news/2019/02/in side-feed-facebook-26-friends-algorithm-myth/.

⁶⁶ Id.

⁶⁷ Id.

⁶⁸ Mosseri, *New Features*, Instagram (Apr. 20, 2022), https://www.instagram.com/reel/Cck9Do_gOPH/?utm_source=ig_embed&utm_campaign=loading.

⁶⁹ Id.

the messages and types of content they consider "worthy of presentation," *Hurley* v. *Irish-American Gay*, *Lesbian & Bisexual Group of Boston*, 515 U.S. 557, 575 (1995), and minimize the reach of content that they consider of lesser value. For some websites, this may involve highlighting content likely to spark as much conversation and dialogue among users as possible. For other websites, it may mean organizing content in a way that facilitates users' exposure to new ideas they might not regularly encounter. And for still others, it might mean prioritizing content of one type—personal updates from family and friends, for example—over other types of content such as news items or advertisements.

3. Algorithms complement and facilitate websites' human moderation and curation efforts

Content moderation and curation (including prioritization and recommendation) decisions are dependent on context and judgment and are highly complex and nuanced. Automated content moderation and curation systems facilitated by algorithms are often one of several strategies websites employ to shape the metes and bounds of expression on their websites. Such algorithms frequently supplement the efforts of dedicated human moderators, fact-checkers, and quality raters who also work to ensure the quality and consistency of the website's expression.

Meta, for example, "works with thousands of moderators around the world to block users from seeing harmful content such as child pornography and images of extreme violence."⁷⁰ Due to the "inherently slow" nature

⁷⁰ OpenAI Says AI Tools Can Be Effective in Content Moderation, Reuters (Aug. 15, 2023), https://www.reuters.com/technology/ openai-says-ai-tools-can-be-effective-content-moderation-2023-08-

of human content moderation, as well as the "mental stress" that can be caused by constant exposure to violent, hateful, and abusive content, many websites supplement with AI moderators.⁷¹ AI-backed content moderation supports human content moderators and scales their moderation decisions to apply across vast swaths of data.⁷²

For example, companies like Meta partner with "independent fact-checkers to review and rate the accuracy of stories through original reporting."⁷³ Meta's developers then use the independent fact-checkers' findings and ratings as inputs to content-moderation algorithms. Poor ratings lead Meta to "significantly reduce that content's distribution so that fewer people see it, label it accordingly and notify people who try to share it."⁷⁴

Google also employs humans to test its search algorithms. It uses human Search Quality Raters, who "collectively perform millions of sample searches and rate the quality of the results."⁷⁵ Human involvement is necessary because "algorithms don't 'know' what message a

^{15/;} Bernal, Facebook's Content Moderators Are Fighting Back, Wired (Nov. 6, 2021), https://www.wired.co.uk/article/facebook-content-moderators-ireland.

⁷¹ OpenAI Says AI Tools Can Be Effective in Content Moderation, supra n.70.

⁷² Darbinyan, *The Growing Role of AI in Content Moderation*, supra n.13.

⁷³ Meta's Third-Party Fact-Checking Program, supra n.19.

⁷⁴ Id.

⁷⁵ Google, Search Quality Rater Guidelines: An Overview 11, Google, https://services.google.com/fh/files/misc/hsw-sqrg.pdf (visited Dec. 6, 2023).

post conveys in the way that a human would" and therefore "make mistakes humans might not, like assuming any image with a swastika is pro-Nazi."⁷⁶ Google's quality rating process allows it to finetune its search algorithms and ensure that its prioritization and ranking is successfully gathering information that best corresponds to users' intended searches.

4. Developers refine websites' content prioritization, ranking, and moderation strategies and algorithms to maintain the desired messaging

Software developers must continuously adapt algorithms to achieve a websites' editorial and curatorial objectives in the face of changing user behavior and conditions. To be effective, content-moderation algorithms cannot simply be set-it-and-forget-it tools. Bad actors sometimes seek to avoid websites' efforts to filter or remove content, actively working to overcome and elude moderation systems. Websites must thus continually evolve their algorithms to remain a step ahead. Given this dynamic, S.B. 7072's prohibition on websites' changing their "user rules, terms and agreements ... more than once every 30 days"⁷⁷ and HB20 Section 2's mandate that websites disclose "specific information regarding the manner in which" they "curate[]," "target[],"

⁷⁶ Keller, What the Supreme Court Says Platforms Do, Lawfare (Sept. 14, 2023), https://www.lawfaremedia.org/article/what-the-supreme-court-says-platforms-do

⁷⁷ Fla. Stat. §501.2041(2)(c)

⁷⁸ Tex. Bus. & Com. Code §120.051(a)(1)-(3).

seriously undermine websites' abilities to exercise their editorial voices.

Users also often attempt to understand and manipulate websites' recommendation and prioritization algorithms so that their content is more frequently recommended or more prominently featured.⁷⁹ Online resources abound that break down various websites' prioritization or ranking algorithms and offer advice on how to game them. Hootsuite, for example, is a website dedicated to online marketing that promises to "mak[e] it easy" for brands and content creators to "[s]ave time and get REAL results on social media."⁸⁰ It offers resources such as a breakdown of the "most important ranking factors of the 2022 Instagram algorithm" and a comparison of Instagram's distinct 2023 algorithms governing its feed, "Stories," "Explore Page," and "Reels" features.⁸¹

Users who post content violative of website terms also develop methods of evading moderation algorithms. To circumvent detection, users might slightly alter their account names following removal or adopt coded language to avoid detection while remaining recognizable to other human users. Users spreading misinformation or hate speech, for example, use deliberate misspellings of key words or slight alterations to images to evade

⁷⁹ Newberry, 2023 TikTok Algorithm Explained + Tips to Go Viral, Hootsuite (Feb. 8, 2023), https://blog.hootsuite.com/tiktok-algorithm/.

⁸⁰ Hootsuite, https://www.hootsuite.com/ (visited Dec. 6, 2023).

⁸¹ Hirose, 2023 Instagram Algorithm Solved: How to Get Your Content Seen, Hootsuite Blog (Apr. 12, 2023), https://blog.hootsuite.com/instagram-algorithm/.

detection.⁸² Others exploit differences in how images are screened as compared to text-based content to embed hate speech in images.⁸³

Software developers are therefore in a constant battle to adapt algorithms to ensure that the websites can continue to enforce their policies and curatorial objectives.⁸⁴ This means both moderating and removing content that is inconsistent with the website's expressive goals and ensuring that its prioritization and recommendation algorithms continue to feature content that is deserving in the eyes of the website, rather than the eyes of the users attempting to manipulate the website's algorithms.

This dynamic means that websites cannot always be entirely transparent about the inner workings of their algorithms and must remain flexible to update their policies and algorithms in real time. The need to stay a step ahead of those intent on gaming the system is one reason why most websites do not publicly share the details of the algorithmic tools that they use to detect misinformation or offensive content or prioritize or recommend

⁸² Steinberg, People Are Using Coded Language To Avoid Social Media Moderation. Is It Working?, PolitiFact (Nov. 4 2021), https://www.politifact.com/article/2021/nov/04/people-are-usingcoded-language-avoid-social-media/; Weimann & Masri, TikTok's Spiral of Antisemitism, 2 Journalism & Media 697 (2021).

⁸³ Anti-Defamation League, *Sliding Through: Spreading Antisemitism on TikTok by Exploiting Moderation Gaps* (Nov. 20, 2023), https://www.adl.org/resources/blog/sliding-through-spreading-antisemitism-tiktok-exploiting-moderation-gaps.

⁸⁴ Hirose, *2023 Instagram Algorithm Solved, supra* n.81 ("One of the greatest joys (read: most maddening features) of the Instagram algorithm is that it changes constantly, so creators and social media managers need to be flexible and open to new updates.").

content to users. S.B. 7072's limit on how often websites can change their rules and HB20 Section 2's extensive disclosure requirements undermine websites' upper hand in this struggle for expressive control. If websites wish to preserve their ability to craft and control the messages they convey, they cannot provide users the tools to override the algorithms functioning to effectuate the websites' expression.

II. THE FACT THAT WEBSITES IMPLEMENT THEIR EDITO-RIAL AND CURATORIAL DECISION MAKING THROUGH ALGORITHMS DOES NOT STRIP THEM OF FIRST AMEND-MENT PROTECTION

A. The First Amendment Protects Editorial And Curatorial Decision Making

At its core, the First Amendment protects "the creation and dissemination of information." Sorrell v. IMS Health Inc., 564 U.S. 552, 570 (2011). Indeed, as this Court has stated, "[i]f the acts of disclosing and publishing information do not constitute speech, it is hard to imagine what does fall within that category." Bartnicki v. Vopper, 532 U.S. 514, 527 (2001) (quotation marks omitted; alteration in original). This protection, moreover, applies equally regardless of whether the speaker creates the information in the first instance or collects and disseminates the speech of others.

As this Court has long recognized, the First Amendment protects the "exercise of editorial control and judgment" over the speech or expressions of others. *Miami Herald Publ'g Co.* v. *Tornillo*, 418 U.S. 241, 258 (1974). In *Tornillo*, that meant that the state of Florida could not force a newspaper to publish a political candidate's response to criticism published in the same newspaper. Newspapers thus can, as an exercise of their right to make decisions regarding "[the] content of the paper, and treatment of public issues and public officials," prioritize certain viewpoints regarding political candidates and refuse to disseminate others. *Id.*

These principles are not limited to traditional, printed media. In the 1980s and 1990s, when cable television (like websites today) "st[ood] at the center of an ongoing telecommunications revolution," this Court recognized there could "be no disagreement" that cable operators "are entitled to the protection of the speech and press provisions of the First Amendment" because they "communicate messages on a wide variety of topics" through their "exercise[e] [of] editorial discretion over which stations or programs to include in [their] repertoire[s]." Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 627, 636 (1994) (quoting Los Angeles v. Preferred Comme'ns, Inc., 476 U.S. 488, 494 (1986)); accord Manhattan Cmty. Access Corp. v. Halleck, 139 S. Ct. 1921, 1930 (2019). A company's billing envelopes, too, are protected, such that no state may compel a company to use its billing envelopes "as a vehicle for spreading a message with which it disagrees." Pacific Gas & Elec. Co. v. Public Utils. Comm'n of Cal., 475 U.S. 1, 17 (1986) (plurality op.). And even more amorphous forms of communication, like parades, are similarly protected, meaning that a parade organizer has the right "to exclude a message it d[oes] not like." Hurley, 515 U.S. at 574. The doctrinal thread through these cases is clear: states may not "[c]ompel[] [third-party] access" to an entity's communication platform, whatever shape that platform may take. Pacific Gas & Elec., 475 U.S. at 9 (plurality op.).

Critically, while the entities' desires to communicate some message of their own has been central to the above holdings, "a narrow, succinctly articulable message is not a condition of constitutional protection." *Hurley*, 515 U.S. at 569. Thus, "a private speaker does not forfeit constitutional protection simply by combining multifarious voices, or by failing to edit their themes to isolate an exact message as the exclusive subject matter of the speech." *Id.* at 569-570. Organizers of a loosely composed parade, as in *Hurley*, combining messages as diverse as "England get out of Ireland,' [and] 'Say no to drugs," therefore have the same right to "select[] [or exclude] contingents" as do newspapers. *Id.* It mattered not in *Hurley* that the curation of participants was not around a particular theme or message; rather, the simple fact that the parade organizers "decided to exclude a message it did not like ... [was] enough to invoke its right as a private speaker." *Id.* at 574.

B. The Same Protections Apply To Coded Algorithms Designed To Curate And Organize Content Created By Others

Online communications websites are simply the latest iteration of communication devices-like newspapers, parades, or cable television—that bring together diverse voices. Like those before it, online communications websites are "more than ... passive receptacle[s] or conduit[s] for news, comment, and advertising." Tornillo, 418 U.S. at 258. Websites remove content that violates their terms; deprioritize or demote content that is low quality, comes close to violating website terms, or has been shared by an account that has repeatedly violated those terms; and promote content likely to be of particular significance to particular users, creating personalized feeds akin to a newspaper's front page, but tailored to each user. Through these decisions, websites express their views regarding what messages are undeserving of dissemination, what messages should be deprioritized, and what messages should be featured prominently.

Unlike newspapers, cable television channels, or parades, however, websites must implement these editorial and curatorial decisions with respect to hundreds of billions of pieces of content a day. Whereas newspaper editors or cable television executives might review each piece of content prior to dissemination, the volume of posts online precludes direct human review of all content. The human decision-making process, however, remains essentially the same. Websites determine, as an expression of their value judgments, what kinds of content they want to accept, prioritize, deprioritize, or remove, and how they want content organized and accessible to users. But then, rather than editors reviewing each piece of content with those considerations in mind. software developers translate those policies into algorithms that can be executed at scale. The decision making is done in advance and applied automatically to the new content that pours in everyday, but the decision making remains entirely human and reflects human judgments regarding what content should and should not appear on a website.

The outputs of websites' content-moderation algorithms are thus expressive in at least two regards. First, at the most basic level, the algorithms are tools for both using and disseminating vast quantities of information. Websites take the information available to them—both about users and content—and, through their algorithms, determine how best to use that information to disseminate content. That itself implicates the First Amendment. As this Court has explained, "[a]n individual's right to speak is implicated when information he or she possesses is subjected to 'restraints on the way in which the information might be used' or disseminated." Sorrell, 564 U.S. at 568 (quoting Seattle Times Co. v. Rhinehart, 467 U.S. 20, 32 (1984)). Second, algorithms that demote or remove content or users shape the overall nature of the communications disseminated by the website, effectuating websites' decisions regarding what "reason' tells them should not be" disseminated. *Tornillo*, 418 U.S. at 256. In the Internet-age analogue to *Hurley*'s parade organizers, websites use algorithms to ensure the messages they disseminate conform to their own standards regarding what messages the website as a whole ought to convey. And, just as in *Hurley*, their "presentation of an edited compilation of speech generated by other persons" is protected by the First Amendment. 515 U.S. at 570.

Texas is wrong (No. 22-555 Supp. Opp. 4-5) that the fact that websites' content-moderation decisions are implemented automatically by algorithms means that websites are purely passive hosts for third-party speech, akin to the law schools in Rumsfeld v. Forum for Academic & Institutional Rights, Inc., 547 U.S. 47 (2006) ("FAIR"). First, the algorithms are the implementation of the websites' content-moderation and content-prioritization decisions. To the extent Texas contends websites are passive with respect to content moderation because algorithms operate automatically, that fundamentally misunderstands the nature of algorithms. As explained above, algorithms are capable of operating automatically only because they have been carefully designed by human software developers, who pre-program the algorithms to operationalize websites' value judgments regarding what content to remove, demote, or prioritize.

To the extent Texas contends websites are passive because websites' algorithms sometimes fail to remove violative content, that too is wrong. Texas points (No. 22-555 Supp. Opp. 4) to this Court's recent decision in *Twitter*, *Inc.* v. *Taamneh*, 598 U.S. 471 (2023), emphasizing that, in that case, Twitter was not actively promoting ISIS content but was instead "nonfeasan[t]" in "fail[ing] to stop ISIS from using th[e] platform[]." 598 U.S. at 500. But the fact that screening algorithms sometimes fail to capture violative content does not negate the websites' attempts to enforce their terms in the only way feasible given the volume of content.

Moreover, that the "recommendation" algorithms at issue in *Taamneh* did not actively promote ISIS content does not mean that such algorithms are passive. Rather, while those algorithms did not in any way single out or prioritize ISIS content over any other content, they did—consistent with the curatorial decision to focus on "predicting the videos [users] want to watch"⁸⁵—disseminate such content to users who had viewed similar videos. Taamneh, 598 U.S. at 499. Filtering and disseminating content based on considerations other than the substance of that content is not passive; such filtering and prioritization—much like selecting a story to highlight on the front page of a magazine not because of its substance but because it shares characteristics with past cover stories that have boosted sales—is an active exercise of editorial discretion.

Second, Texas's analogy to FAIR is inapt. Unlike the law schools in FAIR facilitating on-campus recruiting, social media websites exist for the purpose of disseminating speech. The law schools in FAIR did not disseminate any speech by allowing interviewers on to their campuses, and whatever message might have been communicated by that conduct was, at best, ancillary to the purpose of the interviews (specifically, helping

⁸⁵ Goodrow, On YouTube's recommendation system, supra n.54.

students obtain employment following graduation). In contrast, the message communicated by a post disseminated on an online communications website is itself the purpose of the dissemination. Thus, unlike an on-campus interview, online communications websites exist to disseminate speech. And, as discussed throughout this brief, online communications websites use the curation of third-party speech as a means of ensuring that the messages they disseminate conform to the websites' visions for the kinds of messages that are worthy (or not) of broad dissemination and the kinds of communities they want to foster-thereby creating diverse websites with distinct conversations on each. These websites thus have the "inherently expressive" quality that this Court in FAIR held on-campus recruiting lacks. 547 U.S. at 64.

Finally, contrary to the Fifth Circuit's reasoning (No. 22-555 Pet.App.46a-47a), it makes no difference that content-moderation algorithms sometimes operate on content that has already been disseminated. The Fifth Circuited offered neither caselaw nor even any reasoning to support the contention that deciding what content to distribute in the first instance is expressive, but deciding what content to remove from distribution is The distinction is baseless. It is implausible to not. think, for example, that a law prohibiting newspapers or magazines from running corrections or retractions would not implicate the First Amendment simply because the story to be corrected or retracted had already been published. Nor could a state prohibit a bookstore from ceasing to sell a book it previously sold. What matters under this Court's precedent is whether the distributor of the speech makes a "deci[sion] to exclude a message it did not like," Hurley, 515 U.S. at 574, not when that decision is made.

Algorithms are the tools through which websites implement their content-related policies. They incorporate all of the human decision making of an editor, red pen in hand, reviewing a newspaper mockup, but in a way that can be implemented at the scale demanded by the vast quantity of modern online communications. Their operation may be automatic, but their creation and the functions they carry out are fundamentally both human and expressive.

CONCLUSION

The Court should affirm the decision of the Eleventh Circuit and reverse the decision of the Fifth Circuit.

Respectfully submitted.

SONAL N. MEHTA WILMER CUTLER PICKERING HALE AND DORR LLP 2600 El Camino Real, Ste. 400 WILMER CUTLER PICKERING Palo Alto, CA 94306

HANNAH E. GELBORT WILL C. DARIO HALE AND DORR LLP 60 State Street Boston, MA 02109

ARI HOLTZBLATT Counsel of Record Allison M. Schultz HALE AND DORR LLP 2100 Pennsylvania Ave., NW Washington, DC 20037 (202) 663-6000 WILMER CUTLER PICKERING ari.holtzblatt@wilmerhale.com

DECEMBER 2023