

**SENATE JUDICIARY COMMITTEE**  
**Senator Hannah-Beth Jackson, Chair**  
**2017-2018 Regular Session**

SB 1001 (Hertzberg)  
Version: March 14, 2018  
Hearing Date: April 24, 2018  
Fiscal: Yes  
Urgency: No  
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**SUBJECT**

Bots: disclosure

**DESCRIPTION**

This bill would make it unlawful for any person to use a bot, as defined, to communicate or interact with natural persons in California online, with the intention of misleading and without clearly and conspicuously disclosing that the bot is not a natural person, as specified. The bill would require an online platform to enable users to report violations of this prohibition, to expeditiously respond to those reports, and to provide the Attorney General with regular reports on such reported violations and the associated responses, as specified.

**BACKGROUND**

According to data from Internet security firm Imperva, “bots” are responsible for more web traffic than humans, a trend that has remained relatively consistent over recent years. (Adrienne LaFrance, *The Internet is Mostly Bots* (Jan. 31, 2017) <<https://www.theatlantic.com/technology/archive/2017/01/bots-bots-bots/515043/>> [as of Apr. 7, 2018].) There are numerous types of bots with various functions. Unfortunately, bots considered “harmful” have the edge over those considered “helper bots.”

Some bots are virtually invisible as they carry out their work behind the scenes of search engines and other Internet Web sites. Some are easier to spot. However, whether or not it is apparent, bots and people regularly interact online. For instance, “[s]pambots show up in comment sections and Twitter bots clog people’s timelines with everything from marketing, to political campaigning, to social activism, to utter nonsense.” (*Id.*) “Social media make it easy for accounts controlled by hybrid or automated approaches to create content and interact with other accounts.” (Onur Varol, et al., *Online Human-Bot Interactions: Detection, Estimation, and Characterization* (Mar. 27, 2017) <<https://arxiv.org/pdf/1703.03107.pdf>> [as of Apr. 6, 2018].)

The widespread use of such bots raises some troubling issues. This bill seeks to address one of the fundamental concerns underlying the use of bots online, the deception of

their human counterparts. This bill would make it unlawful to use a bot to communicate or interact with Californians online, with the intention of misleading and without clearly and conspicuously disclosing that the bot is not human. To advance the goal of rooting out deceptive bots, this bill would also provide users the ability to identify and report bots in violation to large-scale online platforms where they are found. Such platforms would be required to expeditiously investigate such notices from users and provide the Attorney General with information concerning the alleged violators and the ensuing investigations and response.

This bill passed out of the Senate Business, Professions and Economic Development Committee on an 8-1 vote.

### **CHANGES TO EXISTING LAW**

Existing law defines “unfair competition” to mean and include any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue, or misleading advertising and any act prohibited by Chapter 1 (commencing with Section 17500) of Part 3 of Division 7 of the Business and Professions Code. (Bus. & Prof. Code Sec. 17200.)

Existing law provides that any person who engages, has engaged, or proposes to engage in unfair competition may be enjoined in any court of competent jurisdiction. The court may make such orders or judgments, including the appointment of a receiver, as may be necessary to prevent the use or employment by any person of any practice which constitutes unfair competition or as may be necessary to restore to any person in interest any money or property, real or personal, which may have been acquired by means of such unfair competition. Any person may pursue representative claims or relief on behalf of others only if the claimant meets the standing requirements of Business and Professions Code Section 17204 and complies with Section 382 of the Code of Civil Procedure, but these limitations do not apply to claims brought under this chapter by the Attorney General, or any district attorney, county counsel, city attorney, or city prosecutor in this state. (Bus. & Prof. Code Sec. 17203.)

Existing law requires actions for relief pursuant to the UCL be prosecuted exclusively in a court of competent jurisdiction and only by the following:

- the Attorney General;
- a district attorney;
- a county counsel authorized by agreement with the district attorney in actions involving violation of a county ordinance;
- a city attorney of a city having a population in excess of 750,000;
- a city attorney in a city and county;
- a city prosecutor in a city having a full-time city prosecutor in the name of the people of the State of California upon their own complaint or upon the complaint of a board, officer, person, corporation, or association with the consent of the district attorney; or

- a person who has suffered injury in fact and has lost money or property as a result of the unfair competition. (Bus. & Prof. Code Sec. 17204.)

Existing law, the False Advertising Law, states that it is unlawful for any person, firm, corporation or association, or any employee thereof with intent directly or indirectly to dispose of real or personal property or to perform services, professional or otherwise, or to induce the public to enter into any obligation relating thereto, to make or disseminate or cause to be made or disseminated before the public in this state, or to make or disseminate or cause to be made or disseminated from this state before the public in any state, in any newspaper or other publication, or any advertising device, or by public outcry or proclamation, or in any other manner or means whatever, any statement, concerning that real or personal property or those services, professional or otherwise, or concerning any circumstance or matter of fact connected with the proposed performance or disposition thereof, which is untrue or misleading, as specified. (Bus. & Prof. Code Sec. 17500.)

Existing law specifies that a violation of this provision is a misdemeanor punishable by imprisonment in the county jail not exceeding six months, or by a fine not exceeding two thousand five hundred dollars (\$2,500), or by both that imprisonment and fine. (Bus. & Prof. Code Sec. 17500, 17534.) Existing law further states that any person who violates this provision shall be liable for a civil penalty not to exceed \$2,500 for each violation, which shall be assessed and recovered in a civil action brought in the name of the people of the State of California by the Attorney General or by any district attorney, county counsel, or city attorney in any court of competent jurisdiction. (Bus. & Prof. Code Sec. 17536.)

Existing law specifies that any person, corporation, or organization, as specified, which violates or proposes to violate the False Advertising Law, may be enjoined by any court of competent jurisdiction, and that a court may make such orders or judgments as may be necessary to prevent the use or employment of practices which violate the False Advertising Law, or which may be necessary to restore to any person in interest any money or property, real or personal, which may have been acquired by means of any practice in the False Advertising Law declared to be unlawful, as specified. (Bus. & Prof. Code Sec. 17535.)

Existing law specifies that actions for injunction under the False Advertising Law may be prosecuted by the Attorney General or any district attorney, county counsel, city attorney, or city prosecutor in this state in the name of the people of the State of California upon their own complaint or upon the complaint of any board, officer, person, corporation or association or by any person who has suffered injury in fact and has lost money or property as a result of a violation of this law. Existing law specifies that any person may pursue representative claims or relief on behalf of others only if the claimant meets the standing requirements of this section, as specified, but that these limitations do not apply to claims brought by the Attorney General, or any district

attorney, county counsel, city attorney, or city prosecutor in this state. (Bus. & Prof. Code Sec. 17535.)

This bill would provide the following definitions:

- “bot” means a machine, device, computer program, or other computer software that is designed to mimic or behave like a natural person such that a reasonable natural person is unable to discern its artificial identity;
- “online” means any public-facing Internet Web site, web application, or digital application, including a social network or publication;
- “online platform” means any public-facing Internet Web site, web application, or digital application, including a social network or publication, that has 50,000,000 or more unique monthly United States visitors or users for a majority of months during the preceding 12 months; and
- “person” means a natural person, corporation, limited liability company, partnership, joint venture, association, estate, trust, government, governmental subdivision or agency, or other legal entity or any combination thereof.

This bill would make it unlawful for any person to use a bot to communicate or interact with natural persons in California online, with the intention of misleading and without clearly and conspicuously disclosing that the bot is not a natural person. Such disclosure would need to be clear and conspicuous to all natural persons with whom the bot communicates or interacts. Language stating the bot “is a bot” or is “auto-generated” would suffice as such a disclosure.

This bill would require an online platform to enable users to identify and report bots that the user suspects of violating the above provisions. Upon receiving such a report, the online platform would be required to expeditiously investigate and determine whether or not to disclose that the bot is not a natural person or remove the bot. Such an investigation and response would be deemed expeditious if it occurred within 72 hours of receipt of the notice.

This bill would require an online platform to provide bimonthly reports to the Attorney General detailing notices received and actions taken in response.

This bill would provide that for text and graphic communications, a statement shall be considered to be made in a clear and conspicuous manner if it is made in larger type than the surrounding text, is in a contrasting type, font, or color to the surrounding text of the same size, or is set off from the surrounding text of the same size by symbols or other marks in a manner that clearly calls attention to the language.

This bill would provide that for audio communications, a statement shall be considered to be made in a clear and conspicuous manner if it is spoken in a clearly audible and intelligible manner at the beginning of the communication.

This bill would provide that for video communications, a statement shall be considered to be made in a clear and conspicuous manner if it is in a written format that meets the requirements for text and graphic communications above and appears for at least four seconds and in an audible format that meets the requirements for audio communications above.

This bill would provide that for any other communications, a statement shall be considered to be made in a clear and conspicuous manner if it is made in a manner that is at least as clear and conspicuous as described in the preceding provisions.

This bill would provide that a statement is not made in a clear and conspicuous manner if it is difficult to read or hear or if the placement is easily overlooked.

This bill would provide that the duties and obligations imposed by this chapter are cumulative with any other duties or obligation imposed by any other law. It would further provide that its provisions are severable, and if any provision or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

#### COMMENT

##### 1. Stated need for the bill

According to the author:

Bots can be -and are often- weaponized to spread fake and misleading news, reshape political debates, and influence advertising audiences. Social media companies do not identify the presence of bot accounts, which masquerade as unique individuals. These bot accounts can be purchased to inflate followers for celebrities, businesses or anyone who wants to create the appearance of a large following or have influence online. Social media platforms are highly influential to users, young and old, and can even drive traditional media cycles. This influence has been used to negatively impact our democracy. Bots can be used in large numbers to misrepresent public sentiments and perceptions about topics, or to mute dissenting opinions and distract from current events. On the Internet where the appearance of a mass audience can be monetized, it is critical to protect users by providing the tools to understand if their information is coming from a human or a bot account disguised as one. Bots, when properly identified, can exist positively in the social media ecosystem.

2. Covert armies of Internet bots are deployed online

a. The troubling utilization of bots to drive social media agendas

Although bots can be found throughout the Internet, their interplay with humans is nowhere more pronounced than on social media platforms. According to research conducted by the Center for Complex Networks and Systems Research at Indiana University and the Information Sciences Institute at the University of Southern California, “[i]ncreasing evidence suggests that a growing amount of social media content is generated by autonomous entities known as social bots.” (Onur Varol, et al., *Online Human-Bot Interactions: Detection, Estimation, and Characterization* (Mar. 27, 2017) <<https://arxiv.org/pdf/1703.03107.pdf>> [as of Apr. 6, 2018].) Their estimates suggest that as many as 15 percent of Twitter accounts are fake. This would mean roughly 48 million Twitter users are bots, automated to simulate real people. Facebook itself disclosed to its investors that the social media platform had “at least twice as many fake users as it previously estimated, indicating that up to 60 million automated accounts may roam the world’s largest social media platform.” (Nicholas Confessore, et al., *The Follower Factory* (Jan. 27, 2018) *The New York Times* <<https://www.nytimes.com/interactive/2018/01/27/technology/social-media-bots.html>> [as of Apr. 6, 2018].)

A recent New York Times investigation explored the shadowy underworld of businesses that create social media bot armies and sell their services to the world. (*Id.*) One company that was highlighted, Devumi, had an estimated stock of at least 3.5 million automated accounts that the company sold many times over. The investigation found the company provided more than 200 million Twitter followers to its more than 200,000 customers, who included celebrities, pastors, businesses, and others seeking to increase their perceived popularity or online influence. Among the company’s customers is even a board member of Twitter. It should be noted that Twitter does not require accounts to be associated with a real person.

One particularly troubling practice is when these bot accounts use the names and/or images of real people. According to the Times’ investigation, at least 55,000 of the fake accounts use the names, profile pictures, hometowns and other personal details of real Twitter users, including minors. This represents “a kind of large-scale social identity theft.”

United States Senator Mark Warner has commented on the issue: “The continued viability of fraudulent accounts and interactions on social media platforms — and the professionalization of these fraudulent services — is an indication that there’s still much work to do.” The United States Senate Intelligence Committee has been investigating the spread of fake accounts on Facebook, Twitter and other platforms.

Most major social media platforms prohibit buying followers. However, their success in the market is largely determined by the number of active users. This creates a perverse incentive for social media platforms to look the other way in the face of these

bot accounts. However, there are few if any protections for users from the deceptive tactics of these bots and their human operators.

b. The use of bots in shaping political discourse: “fake news” and political implications

The use of bots are also infecting our political discourse and processes. A study conducted by researchers at Oxford University found that, in the days leading up to the 2016 Presidential Election, an “automated army of pro-Donald J. Trump chatbots overwhelmed similar programs supporting Hillary Clinton five to one.” (John Markoff, *Automated Pro-Trump Bots Overwhelmed Pro-Clinton Messages, Researchers Say* (Nov. 17, 2016) The New York Times <[https://www.nytimes.com/2016/11/18/technology/automated-pro-trump-bots-overwhelmed-pro-clinton-messages-researchers-say.html?\\_r=0](https://www.nytimes.com/2016/11/18/technology/automated-pro-trump-bots-overwhelmed-pro-clinton-messages-researchers-say.html?_r=0)> [as of Apr. 7, 2018].) The study was based on a collection of approximately 19.4 million Twitter posts. The “chatbots” are “basic software programs with a bit of artificial intelligence and rudimentary communication skills.” According to a sociologist at the Oxford Internet Institute, these specific chatbots were designed “to rant, confuse people on facts, or simply muddy discussions.”

“The use of automated accounts was deliberate and strategic throughout the election,” according to the report, which was published by the Project on Algorithms, Computational Propaganda and Digital Politics. The researchers found that the top 20 Twitter accounts were mostly bots and highly automated accounts that averaged over 1,300 tweets a day, generating more than 234,000 tweets. The study noted that “highly automated accounts – the accounts that tweeted 450 or more times with a related hashtag and user mention during the data collection period – generated close to 18 percent of all Twitter traffic about the presidential election.”

The term “computational propaganda” is used to describe the utilization of these deceptive social media campaigns online. These bots adopt and adapt various retweet and mention strategies to interact with their respective target groups and to more effectively influence them. For example, pro-Trump bots were found to launch into action increasingly earlier during debates between the two candidates and began to “colonize” pro-Clinton hashtags. Additional examples from the presidential election include bots posting embarrassing photos of candidates, making repeated references to inquiries into Mrs. Clinton’s use of a private email server, and spreading “fake news.” The Clinton campaign was found to have deployed “a handful of ‘joke’ bots.” Interestingly, bots were the most effective when distributing negative news reports.

The company discussed above, Devumi, also has fake followers that serve as “phantom foot soldiers in political battles online.” “Devumi’s customers include both avid supporters and fervent critics of President Trump, and both liberal cable pundits and a reporter at the alt-right bastion Breitbart. Randy Bryce, an ironworker seeking to unseat Representative Paul Ryan of Wisconsin, purchased Devumi followers in 2015, when he was a blogger and labor activist.” The company also serves politicians and governments

overseas. The Oxford researchers had previously found that the use of political bots played a role in shaping the political discourse in Britain, leading to the infamous “Brexit” vote.

These examples illustrate the troubling consequences of the dramatic surge in bot activity online, calling into question the appropriate role of bots in informing American political discourse and shaping politics in this country and beyond.

### 3. Providing consumers the tools to sort through the barrage of bot communications

These accounts are counterfeit coins in the booming economy of online influence, reaching into virtually any industry where a mass audience – or the illusion of it – can be monetized. Fake accounts, deployed by governments, criminals and entrepreneurs, now infest social media networks. . . . These fake accounts, known as bots, can help sway advertising audiences and reshape political debates. They can defraud businesses and ruin reputations. Yet their creation and sale fall into a legal gray zone.

(Nicholas Confessore, et al., *The Follower Factory* (Jan. 27, 2018) *The New York Times* <<https://www.nytimes.com/interactive/2018/01/27/technology/social-media-bots.html>> [as of Apr. 6, 2018].)

This bill would provide some legal boundaries on the use of bots and their interactions online. One of the more troubling issues with the use of these bots is that people do not know which other users are fake or real. This bill would directly address this concern by making it unlawful for any person to use a bot to communicate or interact with natural persons in California online, with the intention of misleading and without clearly and conspicuously disclosing that the bot is not a natural person. Humans deploying such bots would need to make disclosures ensuring each natural person with whom the bots communicate is on notice of the bot’s nature.

For their part, online platforms would be required to enable users to identify and report bots violating those requirements. The platforms would be required to expeditiously investigate such reports and determine whether to disclose that the bot is not a natural person or remove the bot entirely. In addition, the platforms would be required to provide the Attorney General with reports, detailing the alleged violations and the subsequent actions taken by the platform.

The bill is fairly narrow in that it only addresses those using bots with “the intention of misleading,” arguably the priority targets for regulation. Furthermore, it defines “online platform” as any public-facing Internet Web site, web application, or digital application, including a social network or publication, that has 50,000,000 or more unique monthly United States visitors or users for a majority of months during the preceding 12 months. Therefore, the provisions providing requirements regarding the facilitation and investigation of user-reported violations would only apply to larger,

more sophisticated operations. In addition, the bill is careful to lay out thorough definitions of its terms to ensure clarity and enforceability, with a few exceptions.

As pointed out by opponents of this bill, the definition of “bot” may be too broad, sweeping in technology that is not the intended target. In addition, the phrase “intention of misleading” could use further clarity to ensure effective enforcement. In response to these concerns, the author has agreed to take the following amendments:

#### Amendments

Amend 17940(a) to read:

“Bot” means an online account that is either automated or designed to mimic or behave like the account of a natural person.

Amend 17941(a) to read:

It shall be unlawful for any person to use a bot to communicate or interact with natural persons in California online, with the intention of misleading a natural person about its artificial identity. A person using a bot is presumed to act with the intent to mislead unless the person discloses that the bot is not a natural person.

Amend 17944 to include the following subdivisions:

(c) The duties and obligations imposed by this chapter shall not apply to bots to the extent they are communicating on behalf of a corporation, limited partnership, limited liability company, or other form of business entity, with users or customers of that business, and the user or customer has specifically opted-in to such communications after clear and conspicuous disclosure about their automated nature.

(d) This section does not impose a duty on service providers of online platforms, including but not limited to web hosting and Internet service providers.

Rooting out bots in violation of these provisions will be a difficult task as “deception and detection technologies are in a never-ending arms race.” (Onur Varol, et al., *Online Human-Bot Interactions: Detection, Estimation, and Characterization* (Mar. 27, 2017) <<https://arxiv.org/pdf/1703.03107.pdf>> [as of Apr. 6, 2018].) However, this bill would start the process of drawing legal lines in the sand and provide mechanisms for human users to join the battle.

Support: None Known

Opposition: California Chamber of Commerce; California Grocers Association; CompTIA; CTIA; Data and Marketing Association; Internet Association; Internet Coalition; TechNet

#### **HISTORY**

Source: Common Sense Kids Action

Related Pending Legislation: AB 1950 (Levine, 2018) would prohibit an operator of a social media Internet Web site with a physical presence in California from engaging in the sale of advertising with a computer software account or user that performs an automated task, and that is not verified by the operator as being controlled by a natural person. It would further require that such sites determine when an account or profile it hosts on its Internet Web site is being controlled by a computer software account or user that performs an automated task, and if so, prominently indicate that to users of its site and require the account or profile to be linked to a natural person. This bill is currently in the Assembly Privacy and Consumer Protection Committee.

Prior Legislation: None Known

Prior Vote: Senate Business, Professions and Economic Development Committee (Ayes 8, Noes 1)

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