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PRESS RELEASE

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CALIFORNIA GOVERNOR GAVIN NEWSOM SIGNS THE NATION'S STRONGEST NEURORIGHTS BILL INTO LAW, EXPANDING THE PROTECTIONS OF THE CALIFORNIA CONSUMER PRIVACY ACT TO NEURAL DATA

California becomes the second jurisdiction in the United States, after Colorado, to define and protect consumer neural data as sensitive personal information. The bill was co-sponsored by the Neurorights Foundation.

Washington, D.C. – On Saturday, California Governor Gavin Newsom signed into law the nation's strongest protections for neural data. Senate Bill (SB) 1223 was authored by California State Senator Josh Becker and co-sponsored by the Neurorights Foundation, an NGO that works to promote innovation, protect human rights, and ensure the ethical development of neurotechnology. It amended the California Consumer Privacy Act (CCPA) by including a consumer's "neural data"¹ under the listed categories of "personal sensitive information."

In doing so, the amended law now protects neural data from misuse and abuse by extending to neural data the same legal protections already granted to other forms of sensitive personal information, such as a consumer's genetic data, biometric data, precise geolocation data, and credentials to access their financial accounts. These protections include the right to know what information is being collected and how it is used or shared; the right to delete collected information; the right to opt-out on the sale or sharing of information; and the right to limit the use and disclosure of sensitive personal information.

The term neurotechnologies refers to devices capable of recording or altering the activity of the nervous system, including the brain, spinal cord and the peripheral nerves. Neurotechnology devices can be either invasive (implantable) or non-invasive (wearable). Long used in medical and research settings, neurotechnology devices are increasingly marketed to consumers in the form of wearable direct-to-consumer products. This brings promising opportunities for product innovation, but it also brings enormous risks given that consumer neurotechnologies are almost entirely unregulated.

Neurotechnology devices used in a medical setting must be licensed by the Food & Drug Administration as medical devices and the collected neural data is generally protected by HIPAA and state medical data privacy laws. But neural data gathered by consumer neurotechnologies is

¹ SB1223 amended Section 1798.140 of the California Civil Code, as amended by Section 5 of Chapter 121 of the Statutes of 2024 to add to the CCPA under categories of "sensitive personal information," a new sub-section (ae)(1)(G)(i), which is "[a] customer's neural data." And under sub-section (ii), it explains "'Neural data' means information that is generated by measuring the activity of the consumer's central or peripheral nervous system, and that is not inferred from nonneural information." This is the scientific and medical definition of neural data and can only be gathered through the use of neurotechnologies.

essentially unregulated, even though these consumer devices can use medical-grade technologies. This is particularly concerning given that neural data is capable of revealing highly sensitive information, including information about mental health, physical health, and cognitive processing.

Indeed, neurotechnologies have been rapidly expanding into the consumer sphere. In a [landmark report](#) published earlier this year, the Neurorights Foundation analyzed the data practices of 30 companies that sell consumer neurotechnology products and the rights provided to their users and concluded they fall far short global privacy standards. The report focused on five areas of concern: Access to Information, Data Collection and Storage, Data Sharing, User Rights, and Data Safety and Security. Significant deficiencies emerged across each category, which is particularly worrying given that 29 of the 30 companies appear to have unlimited access to the consumer's neural data and can transfer consumer data to third parties.

In the coming years, the sensitivity of neural data will increase alongside surging investments from the private sector, governments, and other initiatives, resulting in increased resolution of brain scans and larger datasets of brain data being collected. Meanwhile generative artificial intelligence (AI) will continue accelerating the ability to accurately decode these scans. Today, implantable devices can accurately translate thought to text at [80 words a minute](#). And in a study published in Australia in December 2023, a wearable EEG scanner combined with proprietary software can already decode such inner language with [40 percent accuracy](#). With Apple having filed a [patent application](#) last year for its next generation AirPods, which will have built in EEG scanners, there is every reason to expect that within a few years, consumers will be able to send text messages decoded from their inner language from their smartphones. But these developments will have significant implications on the mental privacy and data rights of neurotechnology consumers.

This is why Senator Becker authored and the Neurorights Foundation co-sponsored [SB 1223](#), a bill that sought to expand the protections of the CCPA to neural data. The CCPA is widely looked to as one of the leading and most comprehensive consumer data privacy laws in the world. On August 31, 2024, having previously been adopted by the California State Assembly's Committee on Privacy and Consumer Protection and Committee on Appropriations unanimously, SB 1223 was adopted on the floor by a vote of 76-0. And later that day, having been previously adopted by the California State Senate's Committee on the Judiciary unanimously, SB 1223 was adopted on the floor by a vote of 38-0. This bill's trajectory mirrored that of a similar neuroprotection bill that was [signed](#) in law by Colorado Governor Jared Polis into law in April 2024. That bill passed the Colorado House of Representatives on a vote of 61-1 and the Colorado Senate on a vote of 34-0.

This bill is particularly important because it applies to the State of California, a global hub for tech innovation and home to Silicon Valley. Tech giants like Meta and Apple, which are in the process of developing their own neurotechnology products — and other startups with neurotechnology products already on the market — are based in California, making California the largest and fastest-growing neurotechnology market in the world. Developments related to consumer neurotechnology regulation in California under the CCPA are expected to have a

ripple effect globally, both in terms of how neural data is defined and in providing a floor for consumer rights.

Upon hearing that Governor Newsom signed the bill into law, Rafael Yuste, Chair of the Neurorights Foundation and Director of the Neurotechnology Center at Columbia University, commented that “This landmark legislation will ensure that neurotechnologies continue unlocking economic development and unprecedented scientific possibility while protecting the extremely sensitive information of those who use them.” Sean Pauzauskie, Medical Director of the Neurorights Foundation and a hospital neurologist, noted that “The California Neurorights Act is an enormous victory for patients suffering from neurological and mental health disorders, as well as consumers looking to enhance their lives. The essential privacy guardrails it ensures should only boost confidence in all varieties of these revolutionary neurotechnologies, the great majority which are based in California, and bring about the greatest good for patients and consumers across California and beyond.”

Jared Genser, General Counsel to the Neurorights Foundation, added: “It was an extraordinary achievement that reflects the enormous importance of protecting neural data that not only was this new law adopted unanimously but it took less than eight months from its introduction to being signed into law. This new law in California will make the lives of consumers safer while sending a clear signal to the fast-growing neurotechnology industry there are high expectations that companies will provide robust protections for mental privacy of consumers. That said, there is much more work ahead. This isn’t an issue that should just be regulated piecemeal by States. The U.S. Congress needs to act urgently to adopt a law to protect neural data at a Federal level. And neural data also needs to be protected by international law, multilateral regulatory processes, and national legislation around the world.”

The Neurorights Foundation is proud to have collaborated closely with the Government of California on this historic effort, and extends sincere thanks to Senator Becker and Governor Newsom for their leadership on this pressing issue.

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