

**SENATE JUDICIARY COMMITTEE**  
**Senator Thomas Umberg, Chair**  
**2023-2024 Regular Session**

SB 893 (Padilla)  
Version: March 19, 2024  
Hearing Date: April 16, 2024  
Fiscal: Yes  
Urgency: No  
CK

**SUBJECT**

California Artificial Intelligence Research Hub

**DIGEST**

This bill directs state entities to establish the California Artificial Intelligence Research Hub to serve as a centralized entity to facilitate collaboration between government agencies, academic institutions, and private sector partners to advance artificial intelligence research and development.

**EXECUTIVE SUMMARY**

The transformative power of AI is unquestionable, and it offers numerous benefits for society, including state government. It can enhance efficiency and effectiveness in various sectors freeing up human resources. AI can improve decision-making processes by analyzing vast amounts of data to identify patterns, trends, and potential insights. This capability enables state governments to make more informed policy decisions, allocate resources more efficiently, and enhance public services. However, as with most technologies, there are also inherent risks and challenges. For instance, concerns about data privacy and security, as Generative AI systems rely on vast amounts of sensitive information. Ensuring transparency, accountability, and fairness in AI systems is crucial to mitigate these risks and maintain public trust. Additionally, there are concerns that the development of this technology and the massive resources and energy it requires will leave government and academic institutions in the dark.

In order to counteract this imbalance, this bill calls for the Government Operations Agency (GovOps), the Governor's Office of Business and Economic Development (GO-Biz), and the California Department of Technology (CDT) to establish the California AI Research Hub ("the Hub"). Through collaborations between public and private sector partners, the Hub will serve to harness AI's full potential for public benefit while addressing the risks and harms highlighted above.

The bill is author-sponsored and supported by the California Institute of Technology and various industry organizations. No timely opposition was received by the Committee. The bill passed out of the Senate Governmental Organization Committee on a vote of 14 to 0.

### **PROPOSED CHANGES TO THE LAW**

Existing law:

- 1) Establishes CDT within GovOps, under the supervision of the Director of Technology (Director), also known as the State Chief Information Officer. (Gov. Code Sec. 11545(a).)
- 2) Requires, upon appropriation by the Legislature, the Secretary of GovOps (Secretary) to evaluate the following:
  - a) The impact of the proliferation of deepfakes on state government, California-based businesses, and residents of the state.
  - b) The risks, including privacy risks, associated with the deployment of digital content forgery technologies and deepfakes on state and local government, California-based businesses, and residents of the state.
  - c) Potential privacy impacts of technologies allowing public verification of digital content provenance.
  - d) The impact of digital content forgery technologies and deepfakes on civic engagement, including voters.
  - e) The legal implications associated with the use of digital content forgery technologies, deepfakes, and technologies allowing public verification of digital content provenance.
  - f) The best practices for preventing digital content forgery and deepfake technology to benefit the state, California-based businesses, and California residents, including exploring whether and how the adoption of a digital content provenance standard could assist with reducing the proliferation of digital content forgeries and deepfakes. (Gov't Code § 11547.5(b).)
- 3) Requires the Secretary to develop a coordinated plan to accomplish all of the following:
  - a) Investigate the feasibility of, and obstacles to, developing standards and technologies for state departments for determining digital content provenance.
  - b) Increase the ability of internet companies, journalists, watchdog organizations, other relevant entities, and members of the public to meaningfully scrutinize and identify digital content forgeries and relay trust and information about digital content provenance to content consumers.

- c) Develop or identify mechanisms for content creators to cryptographically certify authenticity of original media and nondeceptive manipulations.
  - d) Develop or identify mechanisms for content creators to enable the public to validate the authenticity of original media and nondeceptive manipulations to establish digital content provenance without materially compromising personal privacy or civil liberties. (Gov't Code § 11547.5(c).)
- 4) Expresses the intent of the Legislature that policies and procedures developed by CDT and Department of General Services (DGS) pertaining to the acquisition of IT goods and services provide for all of the following: the expeditious and value-effective acquisition of IT goods and services to satisfy state requirements; the acquisition of IT goods and services within a competitive framework; the delegation of authority by DGS to each state agency that has demonstrated to DGS's satisfaction the ability to conduct value-effective IT goods and services acquisitions; and the review and resolution of protests submitted by any bidders with respect to any IT goods and services acquisitions. (Pub. Con. Code § 12101.)
  - 5) Requires CDT, on or before September 1, 2024, to conduct, in coordination with other interagency bodies as it deems appropriate, a comprehensive inventory of all high-risk ADS that have been proposed for use, development, or procurement by, or are being used, developed, or procured by, any state agency. (Gov't Code § 11546.45.5(b).)
  - 6) Requires CDT, on or before January 1, 2025, and annually thereafter, to submit a report, as specified, of the comprehensive inventory to the Assembly Committee on Privacy and Consumer Protection and the Senate Committee on Governmental Organization. This requirement expires on January 1, 2029. (Gov't Code § 11546.45.5(d).)

This bill:

- 1) Requires GovOps, GO-Biz, and CDT to collaborate to establish the California Artificial Intelligence Research Hub in GovOps. The Hub shall serve as a centralized entity to facilitate collaboration between government agencies, academic institutions, and private sector partners to advance AI research and development that seeks to harness the technology's full potential for public benefit while safeguarding privacy, advancing security, and addressing risks and potential harms to society.
- 2) Authorizes collaboration with additional state agencies and academic institutions within the state in establishing the Hub.
- 3) Directs the Hub to accomplish the following:

- a) Increase lawful access to government data while protecting privacy and safeguarding access to data by developing a streamlined process for researchers to access data collected by state agencies, excluding trade secrets. A process for eligibility shall prioritize security by limiting who can access the data and for what purpose.
- b) Support the access to, and development of, AI computing capacity and technology by building out public computing infrastructure, facilitating access to existing commercial computing infrastructure, or finding ways to reduce costs and other economic barriers research institutions may face in accessing computing infrastructure.
- c) Spur innovation in AI applications for the benefit of the public.
- d) Ensure the development of trustworthy AI technologies with a focus on transparency, fairness, and accountability.
- e) Provide researchers with increased access to data and computing resources, education, and training opportunities in furtherance of applications of AI for benefit to the people of California.

### COMMENTS

#### 1. Frameworks for responsible development and accountability in AI

Owing to recent advances in processing power and the rise of big data, AI's capacity and the scope of its applications have expanded rapidly, impacting how we communicate, interact, entertain ourselves, travel, transact, and consume media. For good or ill, its transformative potential seems boundless. With these recent dramatic advances in the capabilities of AI systems, the need for frameworks for accountability and responsible development have become ever more urgent.

In January of 2017, AI researchers, economists, legal scholars, ethicists, and philosophers met in Asilomar, California to discuss principles for managing the responsible development of AI. The collaboration resulted in the Asilomar Principles. Aspirational rather than prescriptive, these 23 principles were intended to initiate and frame a dialogue by providing direction and guidance for policymakers, researchers, and developers. Its endorsers include 1,200 leading experts in the field of AI, including DeepMind founder Demis Hassabis and the late Stephen Hawking.

The Legislature subsequently adopted ACR 215 (Kiley, Ch. 206, Stats. 2018), which added the State of California to that list by endorsing the Asilomar Principles as guiding values for the development of artificial intelligence and related public policy. In broad strokes, those principles aim to do the following:

- *Research issues*: create beneficial AI; direct funding toward beneficial innovation; maintain constructive and healthy exchanges between AI researchers and

policymakers; promote a culture of trust, cooperation, and transparency among researchers and developers of AI; and avoid corner-cutting on safety standards.

- *Ethics and values:* promote safety, failure transparency, judicial transparency, and responsible innovation; align human values with innovation; protect privacy and liberty; ensure that the benefits and prosperity created by AI are broadly shared; maintain human control over AI; develop AI that supports rather than subverts social and civil processes; and avoid an AI arms race.
- *Longer-term issues:* avoid assumptions regarding the capabilities of AI; give AI its due attention; and **recognize that its risks are potentially catastrophic or existential.** [emphasis added]

As directed by the National AI Initiative Act of 2020, NIST developed the AI Risk Management Framework to assist entities designing, developing, deploying, and using AI systems to help manage the many risks of AI and promote trustworthy and responsible development and use of AI systems. That framework highlights the serious risks at play and the uniquely challenging nature of addressing them in this context.

Seeking to establish a framework for California, Governor Gavin Newsom issued Executive Order N-12-23 to “to study the development, use, and risks of artificial intelligence (AI) technology throughout the state and to develop a deliberate and responsible process for evaluation and deployment of AI within state government.”<sup>1</sup>

The executive order includes the following provisions:

- **Risk-Analysis Report:** Directs state agencies and departments to perform a joint risk-analysis of potential threats to and vulnerabilities of California’s critical energy infrastructure by the use of GenAI.
- **Procurement Blueprint:** To support a safe, ethical, and responsible innovation ecosystem inside state government, agencies will issue general guidelines for public sector procurement, uses, and required training for application of GenAI – building on the White House’s Blueprint for an AI Bill of Rights and the National Institute for Science and Technology’s AI Risk Management Framework. State agencies and departments will consider procurement and enterprise use opportunities where GenAI can improve the efficiency, effectiveness, accessibility, and equity of government operations.

---

<sup>1</sup> Press Release, *Governor Newsom Signs Executive Order to Prepare California for the Progress of Artificial Intelligence* (September 6, 2023) Office of Governor Gavin Newsom, <https://www.gov.ca.gov/2023/09/06/governor-newsom-signs-executive-order-to-prepare-california-for-the-progress-of-artificial-intelligence/>. All internet citations are current as of April 10, 2024.

- **Beneficial Uses of GenAI Report:** Direct state agencies and departments to develop a report examining the most significant and beneficial uses of GenAI in the state. The report will also explain the potential harms and risks for communities, government, and state government workers.
- **Deployment and Analysis Framework:** Develop guidelines for agencies and departments to analyze the impact that adopting GenAI tools may have on vulnerable communities. The state will establish the infrastructure needed to conduct pilots of GenAI projects, including California Department of Technology approved environments or “sandboxes” to test such projects.
- **State Employee Training:** To support California’s state government workforce and prepare for the next generation of skills needed to thrive in the GenAI economy, agencies will provide trainings for state government workers to use state-approved GenAI to achieve equitable outcomes, and will establish criteria to evaluate the impact of GenAI to the state government workforce.
- **Legislative Engagement:** Engage with legislative partners and key stakeholders, including academic institutions, in a formal process to develop policy recommendations for responsible use of AI, including any guidelines, criteria, reports, and/or training.
- **Evaluate Impacts of AI on an Ongoing Basis:** Periodically evaluate for potential impact of GenAI on regulatory issues under the respective agency, department, or board’s authority and recommend necessary updates as a result of this evolving technology.

## 2. Ensuring equitable access and development of AI technology

As industry races toward developing larger, more powerful AI models and seeks to commodify the seemingly infinite applications of AI, concerns are growing about the diminishing role that researchers, academic institutions, and more public-focused entities are playing in the development of AI. As reported by the Washington Post:

As such tech behemoths as Meta, Google and Microsoft funnel billions of dollars into AI, a massive resources gap is building with even the country’s richest universities. Meta aims to procure 350,000 of the specialized computer chips – called GPUs – that are essential to run the gargantuan calculations needed for AI models. In contrast, Stanford’s Natural Language Processing Group has 68 GPUs for all of its work.

To obtain the expensive computing power and data required to research AI systems, scholars frequently partner with tech employees. Meanwhile, tech firms’ eye-popping salaries are draining academia of star talent.

Big tech companies now dominate breakthroughs in the field. In 2022, the tech industry created 32 significant machine learning models, while academics produced three, a significant reversal from 2014, when the majority of AI breakthroughs originated in universities, according to a Stanford report.

Researchers say this lopsided power dynamic is shaping the field in subtle ways, pushing AI scholars to tailor their research for commercial use. Last month, Meta CEO Mark Zuckerberg announced that the company's independent AI research lab would move closer to its product team, ensuring "some level of alignment" between the groups, he said.

"The public sector is now significantly lagging in resources and talent compared to that of industry," said [Fei-Fei] Li, a former Google employee and the co-director of the Stanford Institute for Human-Centered AI. "This will have profound consequences because industry is focused on developing technology that is profit-driven, whereas public-sector AI goals are focused on creating public goods."

...

As Silicon Valley races to build chatbots and image generators, it is drawing would-be computer science professors with high salaries and the chance to work on interesting AI problems. Nearly 70 percent of people with PhDs in AI end up in private industry compared with 21 percent of graduates two decades ago, according to a 2023 report.<sup>2</sup>

The bill seeks to address this by directing GovOps, GO-Biz, and CDT to collaborate with other state entities and academic institutions to establish the California Artificial Intelligence Research Hub. The Hub's stated goal is to serve as a centralized entity to facilitate collaboration between government agencies, academic institutions, and private sector partners to advance AI research and development that seeks to harness the technology's full potential for public benefit while safeguarding privacy, advancing security, and addressing risks and potential harms to society.

In carrying out this mission, the bill directs the Hub to facilitate greater access to government data within lawful means. Critically, the bill makes clear that privacy protections and security measures are required and that access to trade secrets is excluded. The process for access must include both use limitations and provide restrictions on who can access it.

---

<sup>2</sup> Naomi Nix, Cat Zakrzewski & Gerrit De Vynck, *Silicon Valley is pricing academics out of AI research* (March 10, 2024) The Washington Post, <https://www.washingtonpost.com/technology/2024/03/10/big-tech-companies-ai-research/>.

Among more lofty general goals, the bill urges the Hub to support access to, and development of public computing capacity and technology. This includes supporting researchers with increased access to computing resources, data, education, and training opportunities.

According to the author:

California is a global leader in technological advancement. Much of that leadership has been driven by our world-class higher education systems. Emerging AI technologies are costly and energy intensive, and require broad-based coordination among institutions and other sectors. Shared resources will be vital to the continued development of AI technology in California. The creation of the California Artificial Intelligence Research Hub allows us to pool and leverage the state's financial resources and the intellectual firepower of our academic sector to democratize AI and stop it from becoming monopolized by proprietary interests alone – the tech titans.

This bill borrows from the direction being taken at the federal level. In his Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, President Biden called for the launch of a pilot program implementing the National AI Research Resource (NAIRR), consistent with past recommendations of the NAIRR Task Force.<sup>3</sup> The goal was to “pursue the infrastructure, governance mechanisms, and user interfaces to pilot an initial integration of distributed computational, data, model, and training resources to be made available to the research community in support of AI-related research and development.”

NAIRR is “a vision for a shared national research infrastructure for responsible discovery and innovation in AI.” The Director of the National Science Foundation is directed to identify Federal and private sector computational, data, software, and training resources appropriate for inclusion in the NAIRR pilot program, to collaborate with other federal entities, establish at least four new National AI Research Institutes, in addition to the 25 currently funded, and to enhance existing successful training programs for scientists, with the goal of training 500 new researchers by 2025 capable of meeting the rising demand for AI talent.

---

<sup>3</sup> *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (October 30, 2023) The White House, <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>; see also *National Artificial Intelligence Research Resource Pilot*, NSF, <https://new.nsf.gov/focus-areas/artificial-intelligence/nairr>.



3. Stakeholder positions

A coalition of organizations, including the Chamber of Progress and the Computer & Communications Industry Association, write in support of the bill:

SB 893 outlines several key responsibilities that would fall under the Hub which would allow it to function as a central facilitator that fosters collaboration among government agencies, academic institutions, and private sector partners to drive forward artificial intelligence research and development. The measure also seeks to responsibly support access to and development of artificial intelligence computing capacity by finding ways to reduce costs and other economic barriers research institutions may face in accessing computing infrastructure. The co-signed organizations believe this is an effective way to promote innovation for public benefit while providing protections for consumer privacy and promoting equity. We believe that SB 893 strikes the right balance of acknowledging the potential immense benefits of artificial intelligence while also safeguarding privacy, advancing security, and addressing risks and potential harms to society.

Writing in support, the California Institute of Technology states:

The State of California, bolstered by its extensive network of research institutions dedicated to the public good, is well-positioned to lead in the development and research of AI technologies, with the aim of optimizing public welfare benefits. However, this endeavor requires resources beyond the scope of any single public entity, including comprehensive data access and advanced computing technology and infrastructure. Notably, other nations such as China and the members of the European Union already have made significant public investments in AI. The imperative to bridge the computing and data access gap for academic institutions in the United States has been highlighted by Stanford's Institute for Human-Centered Artificial Intelligence (HAI) and the leaders of 22 prominent universities.

As the world's fourth-largest economy, California possesses the market influence necessary to spearhead the development of ethical and responsible AI technologies that prioritize the public interest. This includes addressing the disparities in computing resources, facilitating data accessibility, addressing bias, and leveraging the state's esteemed network of research institutions. Building upon the Governor's executive order, which mandates a partnership between UC Berkeley's College of Computing, Data Science, and Society and Stanford University's HAI to organize a summit, Senate Bill 893 seeks to solidify further the State's

partnerships with academic institutions through the establishment of the California AI Research Hub.

### **SUPPORT**

California Institute of Technology  
Chamber of Progress  
Computer and Communications Industry Association  
Engine  
Los Angeles Area Chamber of Commerce  
R Street Institute  
Security Industry Association

### **OPPOSITION**

None received

### **RELATED LEGISLATION**

#### **Pending Legislation:**

SB 721 (Becker, 2023) establishes the California Interagency AI Working Group tasked with delivering a report to the Legislature regarding AI. Group members are to be of varied expertise and shall take input from a broad range of stakeholders to, among other things, recommend a definition of AI and determine the relevant agencies to develop and oversee AI policy and implementation of that policy. SB 721 is currently in the Assembly Privacy and Consumer Protection Committee.

SB 892 (Padilla, 2024) requires CDT to establish an AI risk management standard regarding procurement and use of automated decisionmaking systems (ADS) that is informed by leading established standards. The standard must detail specified procedures for assessing and controlling risks, prohibited use cases, and an assessment for impact on vulnerable communities. State agencies are prohibited from entering into contracts for ADS unless the contract contains specified provisions. SB 892 is currently in this Committee.

SB 896 (Dodd, 2024) largely codifies Governor Newsom's executive order on the use of Generative artificial intelligence (GenAI). The bill requires assessments of the beneficial uses, potential harms, and risks to critical infrastructure of GenAI. The bill calls for the development of guidelines for public sector procurement, uses, and required trainings for the use of GenAI. The bill places obligations on state entities with respect to the use of GenAI and ADS. SB 896 is currently in this Committee.

SB 942 (Becker, 2024) establishes the California AI Transparency Act, which, among other things, requires a covered provider, as defined, to create an AI detection tool by which a person can query the covered provider as to the extent to which text, image, video, audio, or multimedia content was created, in whole or in part, by a generative AI system, as defined, provided by the covered provider that meets certain criteria. Covered providers are required to include in AI-generated content a visible disclosure that, among other things, includes a clear and conspicuous notice, that identifies the content as generated by AI. SB 942 requires a covered provider to register with CDT and provide them a URL to any AI detection tool it has created. SB 942 is currently in this Committee.

SCR 17 (Dodd, 2023) affirms the California Legislature's commitment to President Biden's vision for a safe AI and the principles outlined in the "Blueprint for an AI Bill of Rights" and expresses the Legislature's commitment to examining and implementing those principles in its legislation and policies related to the use and deployment of automated systems. SCR 17 is currently in the Assembly Privacy and Consumer Protection Committee.

Prior Legislation:

SB 313 (Dodd, 2023) would have established the Office of Artificial Intelligence. It would have required state agencies to disclose when they are using generative AI to communicate with a person and to provide them an option to speak with a natural person at the agency. SB 313 died in the Senate Appropriations Committee.

AB 302 (Ward, Ch. 800, Stats. 2023) required CDT in coordination with other interagency bodies, to conduct a comprehensive inventory of all high-risk ADS used by state agencies on or before September 1, 2024, and report the findings to the Legislature by January 1, 2025, and annually thereafter, as specified.

AB 13 (Chau, 2021) would have established the Automated Decision Systems Accountability Act, which, in the context of the State's procurement policies, promotes oversight over ADS that pose a high risk of adverse impacts on individual rights. The bill was eventually gutted and amended to address a different topic.

SB 444 (Umberg, 2019) would have requested the Regents of the University of California (UC) to enact a resolution authorizing the law schools at UC Berkeley and UC Irvine to participate in a pilot project to develop AI or machine-learning solutions to address access to justice issues faced by self-representing litigants in their respective courts. The bill died in the Assembly Higher Education Committee.

AB 1576 (Calderon, 2019) would have required the Secretary of Government Operations to appoint participants to an AI working group to evaluate the uses, risks, benefits, and legal implications associated with the development and deployment of AI by

California-based businesses. The bill was held on the Senate Appropriations Committee suspense file.

SJR 6 (Chang, Res. Ch. 112, Stats. 2019) urged the President and the Congress of the United States to develop a comprehensive AI Advisory Committee and to adopt a comprehensive AI policy.

ACR 215 (Kiley, Resolution Ch. 206, Stats. 2018) *See* Comment 1.

**PRIOR VOTES:**

Senate Governmental Organization Committee (Ayes 14, Noes 0)

\*\*\*\*\*