

# United States Senate

WASHINGTON, DC 20510-0908

May 28, 2025

Jensen Huang  
President & Chief Executive Officer  
NVIDIA Corporation  
2788 San Tomas Expressway  
Santa Clara, CA 95051

Dear Mr. Huang:

We write to express serious concern regarding NVIDIA's reported plans to open a new R&D facility in Shanghai in the People's Republic of China (PRC).<sup>1</sup> This recent decision raises significant national security and economic security issues that warrant serious review. It is troubling that American firms are helping the PRC build cutting-edge semiconductor capacity, which will aid the country's defense-industrial complex and techno-authoritarian capacity.

NVIDIA's innovations in accelerated computing have powered America's global leadership at the frontier of artificial intelligence (AI), and NVIDIA dominates globally in the sale of chips for AI data centers.<sup>2</sup> Given this leading position as an American company, NVIDIA has a responsibility to consider the significant national security implications of the use and misuse of its products. This innovation should occur within the sphere of close democratic allies who share our values and commitment to responsible deployment of these emerging technologies.

Recent reports suggest NVIDIA's planned research facility in Shanghai could support the PRC's development of, and access to, AI hardware and related software, which are dual-use items controlled under U.S. export controls. Unfortunately, this development fits within a pattern of behavior that demonstrates a disregard for U.S. national security and support for autocratic regimes, which is directly and indirectly aiding the PRC's efforts to eclipse U.S. leadership. Just last month, the Bureau of Industry and Security needed to inform NVIDIA that the H20, a chip specially designed for the PRC market, was restricted under U.S. export controls.<sup>3</sup> NVIDIA's decision to chase short-term PRC sales at the expense of U.S. national security—and increasing the exposure to technology transfer—is reckless and short-sighted.

The Chinese Communist Party (CCP) has a long track record of military-civil fusion and

---

<sup>1</sup> Zijing Wu and Michael Acton, "Nvidia Plans Shanghai Research Centre in New Commitment to China," Financial Times, May 16, 2025, <https://www.ft.com/content/c886a4c0-da75-4ea7-8230-6ffd18815fa4>.

<sup>2</sup> Konstantin Pilz et al., "Trends in AI Supercomputers," arXiv.org, April 22, 2025, <https://arxiv.org/abs/2504.16026>.

<sup>3</sup> Rebecca Szkutak, "Nvidia H20 Chip Exports Hit with License Requirement by US Government," TechCrunch, April 15, 2025, <https://techcrunch.com/2025/04/15/nvidia-h20-chip-exports-hit-with-license-requirement-by-us-government/>.

mercantilist arm-twisting,<sup>4</sup> including forced technology transfers in exchange for market access and state-supported espionage against companies. The proposed R&D center's focus on "understanding local customer needs" will, by PRC law, expose NVIDIA to continuous pressure to comply with special conditions on foreign companies and chip-specific regulations that conflict with international governance and ethics standards, such as data surveillance and technology sharing. These practices suggest an R&D facility on PRC territory would pose serious threats to American interests:

- First, despite NVIDIA's statements that core GPU designs remain outside the PRC, NVIDIA is fundamentally a chip design and software company, which means its core intellectual property exists primarily as knowledge and digital designs.<sup>5</sup> This creates unique challenges for establishing "research" facilities abroad, as sensitive design information could potentially be leaked, stolen, or otherwise transferred without physical evidence and without a license.
- Second, reports suggest NVIDIA's facility would "research the specific demands of PRC customers and the complex technical requirements needed to satisfy" export controls.<sup>6</sup> By pursuing an R&D center in Shanghai, NVIDIA risks violating the spirit, if not the written word, of U.S. export control regulations. This will erode trust between your company and the U.S. Congress, which views NVIDIA as a critical player in maintaining technological leadership against strategic adversaries.
- Third, a Shanghai lab would serve as a talent pipeline for frontier technology. NVIDIA is advertising for engineering roles based in Shanghai, including to "guide the development of next-generation deep learning hardware and software."<sup>7</sup> Past experience confirms that helping to mentor and create talent in PRC redounds to the benefit of Chinese state goals. Just as Microsoft and Intel's presence in the PRC helped seed a generation of Chinese startups that supported the CCP's technology goals, NVIDIA now risks doing the same for AI technology.<sup>8</sup> Consider the example of now-sanctioned GPU rival, Biren Technology, which was founded by former NVIDIA employees based in the PRC.<sup>9</sup>

---

<sup>4</sup> Robert Atkinson, "Industry by Industry: More Chinese Mercantilism, Less Global Innovation," Information Technology & Innovation Foundation, May 10, 2021, <https://itif.org/publications/2021/05/10/industry-industry-more-chinese-mercantilism-less-global-innovation/>.

<sup>5</sup> Samantha Subin, "Nvidia Says It Is Not Sending GPU Designs to China after Reports of New Shanghai Operation," CNBC, May 16, 2025, <https://www.cnbc.com/2025/05/16/nvidia-chips-china-shanghai.html>.

<sup>6</sup> Zijing Wu and Michael Acton, "Nvidia Plans Shanghai Research Centre in New Commitment to China," Financial Times, May 16, 2025, <https://www.ft.com/content/c886a4c0-da75-4ea7-8230-6ffd18815fa4>.

<sup>7</sup> Quote reported by Zijing Wu and Michael Acton, "Nvidia Plans Shanghai Research Centre in New Commitment to China," Financial Times, May 16, 2025, <https://www.ft.com/content/c886a4c0-da75-4ea7-8230-6ffd18815fa4>.

One posting advertised "working within a dynamic team to develop and optimize globally competitive ASIC designs": "ASIC Design Engineer - Hardware at NVIDIA in Shanghai, Shanghai, China | 1 Years + Experience," Outscal, 2025, <https://outscal.com/job/asic-design-engineer-hardware-at-nvidia-in-shanghai-shanghai-china-1>.

<sup>8</sup> Karen Weise, Cade Metz, and David McCabe, "Microsoft Debates What to Do with A.I. Lab in China," *The New York Times*, January 10, 2024, sec. Technology, <https://www.nytimes.com/2024/01/10/technology/microsoft-china-ai-lab.html>. Anton Shilov, "Intel Capital's Investments in Chinese AI Startups Draw US Govt Attention — Firm Invests in 43 Chinese Tech Companies," Tom's Hardware, July 16, 2024, <https://www.tomshardware.com/tech-industry/intel-capital-investments-in-chinese-ai-startups-draw-us-govt-attention>.

<sup>9</sup> Jane Lee and Stephen Nellis, "U.S. Ban on Nvidia, AMD Chips Seen Boosting Chinese Rivals," *Reuters*, September 8, 2022, <https://www.reuters.com/technology/us-ban-nvidia-amd-chips-seen-boosting-chinese-rivals-2022-09-08/>.

Considering the serious national security risks posed by NVIDIA's planned R&D facility in Shanghai and ongoing efforts to continue selling advanced AI hardware to the PRC, respond to the following requests and questions no later than June 20, 2025:

- 1) Please provide a comprehensive timeline and description of NVIDIA's plans for the proposed facility and associated work plan, including:
  - a) What specific research/engineering activities would take place at this facility?
  - b) What types and nodes of chips will NVIDIA research or design in the facility? Provide relevant performance parameters or targets, including how they relate to export control thresholds.
  - c) How much capital investment does NVIDIA plan to spend on this new facility overall, including infrastructure, salaries, and other costs—and how does this compare to NVIDIA's global expenditure on R&D? What percentage of your global R&D spending will be at this facility?
  - d) How many and what kinds of researchers/engineers would work there, and what percentage of these technical roles would be filled by PRC nationals?
  - e) How would these new research/engineering activities differ from the work NVIDIA is currently doing in the PRC?
  - f) What does NVIDIA envision as the outcomes of this work? Does NVIDIA seek to substantially increase the AI capabilities of chips while technically staying below export control thresholds? If so, provide details on the magnitude of performance improvement NVIDIA is seeking.
- 2) Please explain why NVIDIA would choose to enrich an authoritarian country's innovation ecosystem by establishing a research center in the PRC rather than conducting this research at facilities located in the United States or allied nations, where NVIDIA could employ Americans or allies' citizens?
- 3) What safeguards does NVIDIA plan to implement to prevent theft/transfer of NVIDIA's technology (e.g., CUDA, chip designs) and PRC poaching of talent?
  - a) How would NVIDIA respond if the government formally or informally demands that NVIDIA share proprietary technology or knowledge as a condition for continued market or talent access? If the PRC's national or local governments have made such demands in the past, provide details about those incidents, including the date, source of the request, terms, and NVIDIA's final decision.
- 4) Is NVIDIA currently receiving or expecting to receive any financial incentives, tax benefits, subsidies, or other forms of support from the PRC at the national or local levels for NVIDIA's existing operations in the PRC or for this planned research center? If so, provide complete details.

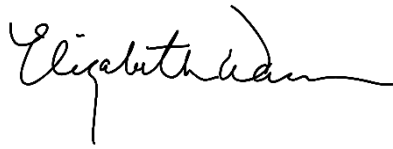
NVIDIA's great financial and technology success was built on American innovation, American university research funded by taxpayers, and the capital, security, and freedom we provide—not through collaboration with autocracies. We look forward to your reply and urge more transparency on these issues.

Thank you for your attention to this important matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim Banks".

Jim Banks  
U.S. Senator for Indiana

A handwritten signature in black ink, appearing to read "Elizabeth Warren".

Elizabeth Warren  
U.S. Senator for Massachusetts