

## US Congress Warned: AI makes PLA Stronger: Is India Listening?

July 26, 2023

Washington DC: **Alexandr Wang**, CEO of Scale AI, told members of the US House Armed Services Committee on July 23, 2023: “**We risk ceding global influence, technology leadership and democracy to strategic adversaries like China**, if we don’t win on AI.” (Reference: <https://tinyurl.com/9774byxy>)

Wang said the Chinese government is spending three times as much as the U.S. government. USA has already taken **two steps** to be ready for facing the challenge of retaining its leadership in AI:



*Nancy Mace, Member US House of Representatives, South Carolina’s 1<sup>st</sup> District*

**FIRST STEP:** The House Committee has already approved, on July 14, Rep. Nancy Ruth Mace’s AI Training Expansion Act, that would require federal officials to be trained up on artificial intelligence systems, in an effort to make sure agencies are as prepared as possible for this rapidly advancing technology. The Act may soon be on the floor of the House for a vote.

**SECOND STEP:** At the G7 meeting of May 19-21, 2023 at Hiroshima, Japan, the members decided to de-risk (not de-couple) their relationship with China.

BACKGROUND: In 2020 in Bn of US \$, the exports of microchips were as follows, with Hong Kong and China constituting the largest export of 270.9: Hong Kong: 153.9; Taiwan: 123.1; China: 117.0; Singapore: 86.2; South Korea: 82.9; Malaysia: 49.3; USA: 44.2; Japan: 28.9; Philippines: 23.7; Vietnam: 14.0; Others: 64.4.

So, **USA**, along with the **Netherlands** and **Japan** – has restricted exports of semiconductor chips and chipmaking tools to China. Beijing has retaliated by banning US firm **Micron Technology** from selling memory chips to key Chinese industries.

The G7 post-Hiroshima meeting statement: "We will take steps, individually and collectively, to invest in our own economic vibrancy. We will reduce excessive dependencies in our critical supply chains."

*Note: Please read about "Chip Wars between China and the West" at <https://diginews360.com/india-to-make-chips-chip-wars-between-china-the-west/>.*

*For understanding the background, Editorial Comments by [www.DiGiNews360.com](http://www.DiGiNews360.com) on page 5 of "India Catching up with China" at <https://diginews360.com/india-catching-up-with-china/> will also be of interest.*

*Please also read "Supply Chains through China and TSMC, the Chip Maker at <https://diginews360.com/supply-chains-through-china-and-tsmc-the-chip-maker/>.*

It is well-known that China is using **facial recognition and computer vision** etc, highly effectively for **surveillance** of its citizens, particularly in sensitive regions like **Xinjiang** and **Tibet**, where non-Hans are in good numbers. It is also rapidly integrating new AI technologies into its warfare systems.

Continuing his testimony before the House Armed Committee, Alexandr Wang added, "The PLA is also heavily investing in **AI-enabled autonomous drone swarms, adaptive radar systems** and **autonomous vehicles.**" He informed the members that China has launched over 79 large language models since 2020.

Regarding data, which is essential for developing AI systems, Alexndr Wang said that USA had the largest fleet of military hardware in the world. He added, "That fleet generates 22 terabytes of data every day – data that can be harnessed to train AI and give the U.S. an insurmountable data advantage when it comes to military use of artificial intelligence." But, he said that **Pentagon must start collecting the data and turn it into "AI-ready data sets."** He suggested building up a **Central Data Repository** by Pentagon.

**Without mincing any words, Wang rejected the possibility that USA and China might be able to work together.**

After listening to Wang's testimony, Rep. **Mike Gallagher, a Wisconsin Republican** who chairs the committee, said of China at Tuesday's hearing, they "will likely use that technology for evil as a way of perfecting a repressive, totalitarian surveillance state as well as exporting that model around the world."

*[www.DiGiNews360.com](http://www.DiGiNews360.com) feels that if USA were to commit the grave error of ignoring Alexandr Wang's advice and if USA were to attempt to work jointly with China, or any other dictatorial regime, for developing AI systems, the dictatorial regimes might use the data and start chipping away at the fundamental freedoms being enjoyed by citizens of USA, without many of them even noticing what was happening to them and their democracy.*

*Even though USA and the west have lost the verve and energy to effectively help spread and deepen democratic movements in those countries, which are suffering from dictatorships or military-usurpers as the rulers, the world trusts USA as the mother of modern democratic systems. Hence the data of many democratic countries is easily available to US software systems, which are also used in other democratic countries. If citizens of USA were to start losing their freedoms, due to adoption of a 'naïve' policy of trying to work jointly with China for developing sensitive AI systems, [www.DiGiNews360.com](http://www.DiGiNews360.com) is afraid, the other democratic countries may also sleep-walk into a state, where the fundamental freedoms of their citizens might also start getting reduced, without the citizens even being aware of what was happening to them.*

"**AI is China's Apollo Project,**" Alexandr Wang, one of the top-most AI experts of the high-tech industries of USA, concluded.

#### ----REGULATIVE ASPECTS----

In November 2022, OpenAI released ChatGPT, a real-time chatbot for users. ChatGPT generates written responses to queries from users. This success led to additional investment by Microsoft of \$10 Bn in OpenAI. OpenAI's valuation jumped to \$30 Bn.

Schools are afraid that ChatGPT may be used by students to cheat in their home assignments. (Please see <https://www.foxnews.com/category/tech/chatgpt> for a brief compilation of such fears and other creative responses. Improved versions of ChatGPT and more such products are being made available. Google's Bard

(<https://bard.google.com/>) and Anthropic's Claude (which is being developed for different companies, like a Poe chatbot for Quora (<https://poe.com/>)) are some products, which have become available.

Microsoft has announced a new version of its BING search engine and Edge browser, that will integrate ChatGPT-style AI language model technology from OpenAI. These new integrations will allow users to see search results with AI annotations side by side and also chat with an AI model similar to ChatGPT. The new features are currently limited to the desktop version of the app. The AI model used in Bing and Edge is called **Prometheus** and is built with the help of OpenAI.

On March 16, 2023, **Robin Li**, Baidu's cofounder and CEO, released Baidu's large language model called **Ernie Bot**, which is an alternative to ChatGPT. Ernie stands for "Enhanced Representation from kNowledge IntEgration." However, its API is available to companies only, probably like **Anthropic's Claude**. It has been made available only to an extremely select pool of Chinese creators. It can solve math questions, write marketing copy, answer questions about Chinese literature, and generate multimedia responses. It performs particularly well on tasks specific to Chinese culture, like explaining a historical fact or writing a traditional poem. Ernie Bot also has a multimodal output feature which ChatGPT and GPT-4 do not offer.

**In USA, there is, as yet, no regulator for these AI products, available freely.**

On the other hand, China's approach is based on the importance that it gives to political stability over innovation. So, it has built a robust **AI domestic regulatory system** in public/commercial spaces: On April 11, the **Cyberspace Administration of China (CAC)** issued "**Measures for the Management of Generative Artificial Intelligence Services.**" These draft principles cover "**deep synthesis**" technologies, including '**machine-generated text, images, audio and visual content**', especially **deepfakes**. The regulations **prohibit AI-driven discrimination**, hold Chinese companies liable for any harm, and **mandate security assessments before AI models are released**.

The **Communist Party of China (CPC)** requires that Technology companies like **Alibaba, Tencent** and **Baidu** moderate the content on their site well so that they follow "socialist core values" and so that they do not challenge State Authority. CAC requires that **AI-generated content must train on censored data**.

But it seems China does not regulate AI use in the military.

By contrast, in January 2023, the Pentagon published "**Autonomy in Weapon Systems**," stipulating they be under the control of humans, transparent, explainable, have top cyber protections, clear feedback loops, and be able to be turned off. U.S. military AI systems must also meet **ethical requirements**, meaning they are responsible, equitable, traceable, reliable and governable.

As a part of the **ATLANTIC DECLARATION** by **UK PM Rishi Sunak** and **US President Joe Biden** on June 8, 2023 at Washington DC, it was decided that USA and UK work jointly in the field of AI. **On June 12, 2023, at** London, the UK Prime Minister Rishi Sunak announced that he wants the UK to become the **leader in regulation of AI**. On June 8, President Biden had declared US support for **Sunak's plan to convene "like-minded" countries for the world's first AI summit in Britain** later this year — while **the prime minister also wants the UK to host a future AI regulatory body**. "The potential of AI is staggering," the president said, saying it had "the potential to do great damage if it's not controlled." "**We are looking to Great Britain to help lead a way through this,**" Biden added.

Many universities and government organizations in the United States and European Union are already engaged in their own **dialogue on an AI code of conduct** as industry figures plead for regulation.

*Note: Please read about "AI: PM Narendra Modi: "We welcome all Collaborations"" of June 11, 2023 at <https://diginews360.com/ai-pm-modi-wewelcome-all-collaborations/>*

*Please read pages 2-3 of "AI... 'Special Relationship' wit USA" at <https://diginews360.com/ai-johnson-honours-list-special-relationship-with-usa/> about UK PM Rishi Sunak's USA Visit of June 8, 2023.*

*Please read "Required: Regulation of AI Products" dated March 31, 2023 at <https://diginews360.com/required-regulation-of-ai-products-march-31/>.*

#### ----INDIAN PERSPECTIVE----

India has IISc, 16 IITs, 31 NITs and a large number of State Technological Universities and Private Universities. It also has at Bangalore a **Center for AI and Robotics (CAIR), established in 1986**. CAIR has been headed by the top-most experts, with Dr. M. Vidyasagar as its Director for more than a decade (26 June 1989-28 Mar 2000) during its formative years.

India has missed a focused approach for developing AI products for use of the society is missing, even though India has a large number of AI experts in different organizations.



*The Research and Development of products for Indian Armed Forces is shrouded in secrecy. As far as [www.DiGiNews360.com](http://www.DiGiNews360.com) knows, India has not integrated AI into its systems for War.*

*On the other hand, China is fast outpacing even USA in its expenditure on its armed forces. As pointed out by Alexandr Wang, China's expenses on AI are 3 times that of USA. Hence the challenge of the modernized PLA can be met only by marshalling the experts available in the different institutions in India. The opinion of [www.DiGiNews360.com](http://www.DiGiNews360.com) is that an effective collaboration among USA, UK and India may be able to meet the challenge to the democratic world posed by the axis of China, North Korea and their associates in Russia, Afghanistan and Iran effectively.*

#### ----APPENDIX 1: A Brief Note on Scale AI----

Scale, founded in 2016, began with annotating AI data for autonomous vehicle programs at General Motors and Toyota. By now, Scale is working with leading technology companies such as OpenAI, Meta and Microsoft, and the U.S. government, including the **Department of Defense's Chief Digital and Artificial Intelligence Office (CDAO)**, U.S. Army, and U.S. Air Force. Today Scale's technology and platforms power many ambitious AI projects and is a leader in AI infrastructure development.



*CEO Scale AI: Alexandr Wang*

Alexandr Wang, the founder of Scale AI, was raised by two parents who worked as nuclear physicists at Los Alamos National Laboratory, where the first Atomic Bombs, which helped end the 2<sup>nd</sup> World War, were developed. Wang started his company in 2016 after dropping out of MIT when he was 19. He built Scale AI by focusing on data annotation, outsourcing the human task of labeling images and videos to train AI programs. ScaleAI relies on more than 240,000 workers in countries including Kenya, Venezuela, and the Philippines. **Scale AI was recently valued at more than \$7 billion, making Wang the youngest self-made billionaire of the world.**