contest. The restrictions upon the export of advanced American chips to China and China's attempts to develop indigenous chips and cloud-processing capacities are explicit exemplars of this contest. These measures have not only influenced markets and global value chains but have also accelerated the formation of new technological blocs. Any state or region that lags in this contest will be exposed to the diminution of economic influence and the threat of security vulnerabilities.

Artificial intelligence has rapidly transformed into the principal catalyst of global productivity growth. Estimates indicate that the share of artificial intelligence in the global economy will reach more than \$15 trillion by 2030, a substantial portion of which will belong to China and the United States. This phenomenon demonstrates that the future dominance of the global economy depends upon the capacity of states to utilize with efficacy the technologies of deep learning, intelligent decision-support systems, and industrial automation. Companies and venture-capital funds serve as the connective bridge between policy and market and determine the grand geo-economic orientations.

The contest between China



Humanoid robots by Shanghai's startup Dataa Robotics replicate the Buddhist-style dance of the Thousand-hand Goddess of Mercy at the ce Conference in Shanghai, China, on July 6, 2023. CK TAN/NIKKEI ASIA

engendered the emergence of a new technological balance. If, in the 20th century, nuclear deterrence constituted the guarantor of the stability of powers, in the 21st century, algorithmic superiority and the supervision of big data have become the new criteria of global power and influence. States that lag in this domain will be constrained not only

and the United States has also in the economy but also in values and political objectives national security and foreign policy. In social and governance di-

mensions, the United States concentrates upon the preservation of individual liberties, privacy, and the ethics of artificial intelligence, whereas China concentrates upon efficiency, social order, and digital security. These two divergent orientations reflect their distinct

and have produced two rival models of digital governance in the world.

Artificial intelligence has caused transformations in supply chains, demand forecasting, renewable energies, and financial services. American companies are preeminent in the development of advanced algorithms and analytical models, whereas China

possesses superiority in the scalability and commercialization of industrial applications of artificial intelligence. These structural differences have endowed the two states with a combination of software and hardware advantages and have produced a continuous and intricate contest in the global market.

The contest between the United States and China in the domain of artificial intelligence is not merely a technological contest, but it entails a fundamental redefinition of power and wealth in the digital world. This contest, with economic, security, social, and governance dimensions, will influence the future of global order and will transfigure the trajectory of states in confronting the rapid transformations of technology. The United States, with innovation, venture capital, and advanced infrastructures, and China, with industrial scalability and data-centrism, pursue different yet equivalent trajectories, and the future of global power will not be determined by military might, but by domination over data resources and decision-making algorithms.

The article was first published in Persian by Iranian Diplomacy.

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world.

## It's time to reckon with geopolitics of Al



The headlines from Donald Trump's recent meeting with Xi Jinping were all about the US and Chinese presidents reaching a trade truce. But what was lost in the news is a far more significant matter that will shape the high-stakes competition unfolding between the world's two most significant powers: the contest for the commanding heights of artificial intelligence (AI).

The world has entered the most consequential tech race since the dawn of the nuclear age, but this time, the weapons are algorithms instead of atoms. Rather than a race to obtain a single superweapon, this is one to determine how societies think, work, and make decisions. AI is transforming not only the distribution of power around the globe but also the very nature of that power and how it will be exercised.

## A race with generational

consequences The Chinese government sees AI as a crucial driver for what it calls "comprehensive national power". That's why it is so focused on the rapid integration of AI into surveillance. consumer products and services, advanced manufacturing, military modernization, and even scientific discovery under a unified state strategy. As Tess deBlanc-Knowles, senior director with Atlantic Council Technology Programs, tells me. "One of the notable aspects of China's approach is the prioritization of application, or what is called 'AI-plus'. China has an advantage over the US in terms of providing direction and incentives for the integration of AI across all sectors of the economy."

When it comes to AI development and deployment, China's private sector must be subservient to the will of the Communist Party. The cycle of innovation that results is distinct from Western conceptions of more loosely connected relationships among policymakers, industry, and academia.

The United States, by contrast, relies much more heavily on the singular dynamism of its private sector, open research culture, and international alliances. The US government struggles to coordinate its private stakeholders and universities at any national scale. The country remains hamstrung by weakening legal protections for privacy and intellectual property that tend to introduce ambiguity rather than clear running lanes.

And run the United States must. Failure to maintain US leadership on AI could have generational consequences. The outcome of this contest will determine which values set global norms on everything from digital commerce to autonomous warfare.

"The escalating AI race is drawing comparisons with the Cold War, and the great scientific and technological clashes that characterized it," write Josh Chin and Raffaele Huang in the Wall Street Journal. "It is likely to be at least as consequential." They write that both China and the United States "are driven as much by fear as by hope of progress".

There's little doubt that who wins this race will depend on who can produce the most advanced chips, the best models, the most potent computers, and the cheapest and most sustainable energy for a proliferation of

More significantly, the emerging AI contest is about defining





the world's future standards in areas such as freedom, privacy. and even human dignity. The design of the internet — its core protocols and standards - reflected a bias toward openness, self-organization, and free speech that have shaped two generations of lives online and trillions of dollars in consumer technology. This moment in the AI era offers the same pivotal opportunity for influence.

## Los Alamos this isn't

I began by writing that the current tech race is the most consequential for humanity since the beginning of the nuclear era. Some have gone further, drawing a direct comparison between the race for AI preeminence and the Manhattan Project that produced the first nuclear weapon. What's true is that the AI race, like the Manhattan Project before it, will be decided to some extent by scientific breakthroughs. Both also share the potential for great good and catastrophic harm.

Yet this is also a misleading analogy. The Manhattan Project was a clandestine, centralized, US government-led sprint at a time of World War. The US government did have an important role in enabling the AI revolution through the development of technical foundations for deep learning and other advancements. But it has been private industry, not the government, that has leveraged and innovated to get to today's capabilities. To win this race, governments know they must work effectively with private companies such as Anthropic, Google, Nvidia, Microsoft, and OpenAI in the United States and Alibaba, DJI, High-Flyer, and Huawei in China. Such companies wield budgets and global reach that would make most defense ministries blush.

## China going to win AI

The American edge is in its democratic, free market, innovative ecosystem, which, at its best, is an unmatched magnet for talent and capital. Yet that ecosystem is also a vulnerability in that Washington can't control or leverage its tech champions for any overriding national security purpose in the manner Beijing does routinely.

China is going to win the Al race." Nvidia CEO Iensen Huang told the Financial Times last month, pointing to Beiiing's looser regulations, new energy subsidies, and direct intervention to assist its champions. Industry leaders worry that the Trump administration

focuses more on restricting what US firms can sell to China than on energetically helping its companies win the race. 'We need more optimism," Huang said a week after Trump announced that he would stop China from gaining access to both Nvidia's cutting-edge Blackwell chips and a less advanced chip designed explicitly for the Chinese market, and just a few days after the company reached an unprecedented market capitalization of five trillion dollars.

China's system fuses state and private ambition in a manner that could be decisive, mobilizing government, private capital, and leading-edge science around a common cause dictated by Xi and the Communist Party. The system intentionally aligns national goals with corporate incentives. While US companies focus on winning markets, competing with each other, and turning profits, Chinese companies that fail to serve the state and the party do so at their own

In the United States, by contrast, the messiness of the free market could prove an enduring strength in directing capital, talent, and attention to cutting-edge technologies. Winning the race to adopt AI will require newly integrated thinking across the development, use, and consequences of the technology, rather than a narrow focus on how to build more chips or run faster models.

The Manhattan Project changed history with an explosion. The demonstrations of success won't be as dramatic with AI, but they will affect every person on the globe. And the outcome may be just as far-reaching in determining what group of countries and which set of values determine the future.

The full article first appeared on the Atlantic Council.



The chart shows the world's 50 most valuable private companies VISUAL CAPITALIST