



ACADEMIC SECURITY AND COUNTER EXPLOITATION PROGRAM

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# THE OPEN SOURCE MEDIA SUMMARY

**July 20, 2022**

## **IT'S GETTING HARDER FOR SCIENTISTS TO COLLABORATE ACROSS BORDERS – THAT'S BAD WHEN THE WORLD FACES GLOBAL PROBLEMS LIKE PANDEMICS AND CLIMATE CHANGE**

*Tommy Shih | The Conversation | July 13, 2022*

The United Nations and many researchers have emphasized the critical role international collaborative science plays in solving global challenges like climate change, biodiversity loss and pandemics. The rise of non-Western countries as science powers is helping to drive this type of global cooperative research. For example, Brazil, Russia, India, China and South Africa formed a tuberculosis research network in 2017 and are making significant advancements on basic and applied research into the disease. However, in the past few years, growing tensions among superpowers, increasing nationalism, the COVID-19 pandemic and the war in Ukraine have contributed to nations' behaving in more distrustful and insular ways overall. One result is that it is becoming increasingly difficult for researchers to collaborate with scholars in other nations. The near-global cessation of collaboration with Russian scholars following the invasion of Ukraine – in everything from humanities research to climate science in the Arctic – is one example of science being a victim of – and used as a tool for – international politics. Scientific collaboration between China and the U.S. is also breaking down in fields like microelectronics and quantum computing because of national security concerns on both sides.

Read the full article [here](#).

## **HOW MANY YEARS IS CHINA AHEAD OF US IN TECHNOLOGY 2022**

*Jason Wise | EarthWeb | July 12, 2022*

'Made in China' is a phrase we hear and often see in our daily lives, be it your new phone or the toy in your child's hand, but why does it seem to be everywhere? How many years is China ahead of US in technology? Does it really matter? Though there is a lot of debate about the rise of China in different fields and if it will ever pass the USA, it is obvious if we look at the development of China in these years. Today, the USA is dominant in many fields, but China is already leading research and seems to be fast climbing in other fields. It has contributed significantly to research, military and different technologies. These achievements can also be said as the cause for tension between The US and China which has risen in recent years. Here's a look at some fields China is leading and/or growing rapidly in: China holds 389,571 out of over 520,000 AI patent applications globally, Tiktok has 690 million monthly active users worldwide, China has the largest Air force in the Asia Pacific, China ranked 14th Position in the global innovation index, and China's education market received over \$10 billion in 2020.

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# THE U.S. NEEDS A MILLION TALENTS PROGRAM TO RETAIN TECHNOLOGY LEADERSHIP

Graham Allison | *Foreign Policy (FP)* | July 16, 2022

What is the single most significant step the United States can take to sustain the technological predominance it has enjoyed since World War II? The answer should be obvious: to actively recruit the most talented minds in the world and welcome them into a society where they have the opportunity to realize their dreams. From physicist Albert Einstein and the other European scientists who helped the United States win World War II and land on the moon to the founders of Intel, Google, eBay, Uber, and the many technology companies that have powered economic growth, smart and ambitious immigrants have been the country's secret sauce. To sustain the United States' technology leadership in the face of China's formidable economic and military challenge, U.S. President Joe Biden should launch an urgent drive to recruit and retain 1 million tech superstars from around the world by the end of his first term in office. It's not just a matter of enticing new immigrants but of retaining bright minds already in the country.

Read the full article [here](#).

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## CHINA'S ROADBLOCKS TO BECOMING A SCIENCE SUPERPOWER

Ma Xiu and Peter W. Singer | *Defense One* | July 17, 2022

A future in which China is the world's dominant scientific power fills the imagination of leaders in both East and West. In Beijing, China has entered its latest policy-planning period, the 14th Five-Year Plan. Building on strong performance in common science-and-technology indicators and advances in cutting-edge areas such as AI, quantum computing, and hypersonic flight, China is now striving to achieve two of the remaining milestones outlined in its 2016 Innovation-Driven Development Strategy: joining the front rank of innovative countries by 2035 and becoming a "global scientific great power" by 2050. All this has animated calls for an American response to ensure the United States' leading position in scientific and technological progress. Countless articles and reports frame it as a new "Sputnik Moment" and a key element of U.S.-China strategic competition. This has led to a host of new proposals and policy initiatives, ranging from increases in DoD research spending to the recent debate over the China competition bill in Congress.

Read the full article [here](#).

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## CHINA'S ADVANCED AI RESEARCH: MONITORING CHINA'S PATHS TO "GENERAL" ARTIFICIAL INTELLIGENCE

William Hannas, Huey-Meei Chang, Daniel Chou, and Brian Fleegeer | *Center for Security and Emerging Technology* | July 2022

China is following a national strategy to lead the world in artificial intelligence by 2030, including by pursuing "general AI" that can act autonomously in novel circumstances. Open-source research identifies 30 Chinese institutions engaged in one or more of this project's aspects, including machine learning, brain-inspired AI, and brain-computer interfaces. This report previews a CSET pilot program that will track China's progress and provide timely alerts. This paper seeks to determine on the basis of publicly available information ("open sources") who in China is taking what steps toward general artificial intelligence, as shown by overt expressions and other common measures. While typically conceived as "artificial general intelligence" or AGI, this paper rejects that ambiguous term, along with its usual association with human-level machine intelligence, in favor of an approach that recognizes diverse pathways to broadly capable AI that functions autonomously in novel circumstances.

Read the full article [here](#).



## **FEDERAL FOCUS ON INAPPROPRIATE FOREIGN INFLUENCE ON RESEARCH: PRACTICAL CONSIDERATIONS IN DEVELOPING AN INSTITUTIONAL RESPONSE**

*Elizabeth Peloso, Robert Hardy, Allen DiPalma, Naomi Schrag, and Kris West | Council On Governmental Relations | August 18, 2021*

Over the past several years there has been increasing concern about potential malign foreign influence and research security risk at U.S. research institutions. These concerns encompass a variety of activities such as: nondisclosure of foreign gifts to and contracts with U.S. academic institutions; recruitment of U.S. scientists to participate in foreign government-sponsored talent programs (FGTPs) that support the development of critical emerging technologies; and theft of intellectual property and/or diversion of intellectual capital developed with U.S. government funds at U.S. research institutions. While certain countries, including Russia, Iran, and others, have caused concern, the U.S. government's primary focus has been on the People's Republic of China (China), as illustrated by FBI Director Christopher Wray's February 2018 address before the U.S. Senate Intelligence Committee in which he stated that the academic sector was naïve to the China threat.<sup>1</sup> Since 2018, Congress and U.S. funding agencies have taken, and continue to take, action to address the perceived threat that the open U.S. academic environment poses to research security.

Read the full article [here](#).

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## **DARPA SCREENING FOR 'RISK' IN RESEARCHERS' FOREIGN AFFILIATIONS**

*Mitch Ambrose | American Institute of Physics | February 15, 2022*

For over three years, the Department of Defense has been responding to congressional direction aimed at securing the research it funds from potential exploitation by rival governments. While many federal agencies have stepped up their research security efforts, DOD's moves have generally been more expansive, both because they extend to the protection of R&D geared toward military applications, and because Congress has given the department additional mandates. Now, the Defense Advanced Research Projects Agency is implementing a "Countering Foreign Influence Program" that involves assessing risks posed by researchers' affiliations with foreign institutions, even for unclassified projects in fundamental research. While other science agencies have likewise expanded their use of disclosure policies to identify problematic conflicts of interest and time commitment, DARPA's policy goes further by tying the review process to specific categories of foreign entities of concern.

Read the full article [here](#).

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## **UNDERSTANDING CHINA'S LONG-TERM STRATEGIC VISION**

*Neeraj Singh Manhas | Organisation for Research on China and Asia | July 12, 2022*

Prior to the 20th Party Congress (PC) of the Communist Party of China (CPC) due later this year, the public domain preparatory materials provide a very clear image of future drives, motivations, and strategic perceptions. At least four key documents come to mind in this context. These include: The Historical Resolution introduced on 11/11/2021. According to the official description of the meeting's resolution, China has "made historic achievements and undergone a historic transformation" under Xi's leadership. It lauded Xi, Mao, and Deng for guiding the country through "the momentous shift from standing up and becoming affluent to becoming strong." The Communiqué of the 6th Plenum of the 19th CPC Central Committee in 11/11/2021. The Central Committee heard and discussed the report on the work of the Political Bureau, which was presented by Xi Jinping on behalf of the Political Bureau.

Read the full article [here](#).



## HOW HACKERS CREATE FAKE PERSONAS FOR SOCIAL ENGINEERING

John Hammond | Dark Reading | July 15, 2022

On April 18, 2022, a handful of US citizens scrambled to get their taxes filed. While tax season is usually a stressor, consider that these filers got some unsolicited help. Imagine that somehow, strangers that might resemble angels just appeared in their lives, offering guidance and help to work with them through this process ... all through the computer screen. For our story, let's consider we receive a benign LinkedIn message from "Alice Dupree," stating that she is a liaison with H&R Block and is reaching out to offer any assistance in filing taxes. If we examine Alice's profile, everything mentioned lines up with her public presence. In fact, she looks like a very reputable person! She attended a prestigious university, has had a prolific career, and has an enticing professional summary. While we could review her education and past work experience with her LinkedIn profile, there is certainly other demographic, geographic, or personal information that we wouldn't see online. So let's talk about Alice on a more personal level. She is 49 years old, she lives in San Diego, California, and her favorite color is black (to match the business suits she wears). On top of that, she was born on July 1, 1972, and her zodiac sign is Cancer.

Read the full article [here](#).

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## CONTROVERSIAL CONFUCIUS INSTITUTES RETURNING TO U.S. SCHOOLS UNDER NEW NAME

Lin Yang | Voice of America (VOA) | June 28, 2022

Confucius Institutes, the controversial Beijing-backed language and cultural learning centers — most of which were closed throughout the United States after being designated a foreign mission by the State Department — are rebranding and reopening, according to a report by the National Association of Scholars. Of the 118 Confucius Institutes that once existed in the United States, 104 were closed as of June 21 and four are in the process of shutting down, according to the report. Of these, "at least 28 have replaced their Confucius Institute with a similar program, and at least 58 have maintained close relationships with their former Confucius Institute partner," according to the report. Perry Link, professor of Chinese language studies at the University of California Riverside, said he was shocked after reading the June 21 report, which updates a March 2018 report. Link told VOA Mandarin that he was struck first by "how many Confucius Institutes have been shut. I didn't expect the rate of closures to be so high. Second, they still exist in another way with another name. I think this is expected. I just didn't expect it to happen so soon."

Read the full article [here](#).

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## BUILDING A NEW TECHNOLOGY DIPLOMACY FOR THE 21ST CENTURY

Deborah Wince-Smith | Forbes | June 29, 2022

Over the past decade, the Asia-Pacific region has risen in its strategic importance to the United States, in terms of economic and national security. It is now the world's economic engine, high-tech manufacturing powerhouse, and burgeoning source of cutting-edge technology. It is home to the world's fastest-growing markets fueled by a booming middle class and expected to drive the dynamics of the 21st century global economy. The region is also the launchpad for China's quest for global leadership. Locked in a strategic competition with the United States, China knows its power to influence the international economic, trade and security landscape rests with its technological prowess. Scientific and technological innovation is the main battlefield of the international strategic game, as declared by Chinese President Xi Jinping, with the aim that China will seize the commanding heights of technology. His government uses the promise of cooperation in technology as an incentive for emerging and developing countries to engage in alliances with China, expanding its ability to shape the rules for the next global economy.

Read the full article [here](#).

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## **EMBATTLED HARVARD SCIENTIST CHARLES LIEBER GOES ON A COUNTER-OFFENSIVE, HIRING HIGH-PROFILE LAWYER AND SUING HARVARD FOR ABANDONING HIM AMID FEDERAL PROBE**

Jason Mast | Endpoints News | October 12, 2020

Charles Lieber, the Harvard scientist facing federal charges for allegedly lying about Chinese funding, is mounting a fierce legal defense, beginning with the enlistment of a high-profile attorney and a lawsuit against his employer. Lieber hired Marc Mukasey, a criminal attorney who defended former Navy Seal Edward Gallagher against war crime charges last year and currently represents Eric Trump in a New York state fraud case, the New York Times first reported. And on Friday, he filed suit against Harvard, alleging the university abandoned him and their responsibility to indemnify him or aid his legal defense. The legal maneuvering sets Lieber apart from the other researchers caught up in the Justice Department's effort to weed out scientists it claims were siphoning research from the US to China, under the so-called Thousand Talents program.

Read the full article [here](#).

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## **CHINA'S TROJAN HORSE CONFUCIUS INSTITUTES PERSIST ON CAMPUSES | OPINION**

Ben Weingarten | Newsweek | July 18, 2022

Would any sane nation permit its enemies to freely propagandize at its educational institutions; intimidate faculty into silence, self-censorship, and complicity in enemy information operations; and hold funds over said institutions' heads as leverage? If the answer is a resounding "No," as it should be, then it is hard to see the American academy as anything other than insane—and dangerously so—when it comes to China and its Confucius Institutes, as a bombshell report from the National Association of Scholars (NAS) makes clear. The report demonstrates that news of Confucius Institutes' death in America has been greatly exaggerated.

Read the full article [here](#).

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## **CISA ORDERS AGENCIES TO PATCH NEW WINDOWS ZERO-DAY USED IN ATTACKS**

Sergiu Gatlan | Bleeping Computer | July 12, 2022

CISA has added an actively exploited local privilege escalation vulnerability in the Windows Client/Server Runtime Subsystem (CSRSS) to its list of bugs abused in the wild. This high severity security flaw (tracked as CVE-2022-22047) impacts both server and client Windows platforms, including the latest Windows 11 and Windows Server 2022 releases. Microsoft has patched it as part of the July 2022 Patch Tuesday, and it classified it as a zero-day as it was abused in attacks before a fix was available. "An attacker who successfully exploited this vulnerability could gain SYSTEM privileges," Microsoft explained in a security advisory published today.

Read the full article [here](#).

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