



ACADEMIC SECURITY AND COUNTER EXPLOITATION PROGRAM

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U.S.-CHINA TECHNOLOGICAL “DECOUPLING”: A STRATEGY AND POLICY FRAMEWORK

Jon Bateman | Carnegie Endowment for International Peace | April 25, 2022

Technology is the engine that powers superpowers. As the chair of the National Security Commission on Artificial Intelligence (NSCAI), I led the effort that ultimately delivered a harsh message to the U.S. Congress and to the administration: America is not prepared to defend or compete in the AI era. The fact is that America has been technologically dominant for so long that some U.S. leaders came to take it for granted. They were wrong. A second technological superpower, China, has emerged. It happened with such astonishing speed that we're all still straining to understand the implications. Washington has awakened to find the United States deeply technologically enmeshed with its chief long-term rival. America built those technology ties over many years and for lots of good reasons. China's tech sector continues to benefit American businesses, universities, and citizens in myriad ways—providing critical skilled labor and revenue to sustain U.S. R&D, for example. But that same Chinese tech sector also powers Beijing's military build-up, unfair trade practices, and repressive social control.

Read the full article [here](#).

PLAYING OFFENSE IN THE RACE FOR TECHNOLOGY LEADERSHIP: PRIORITIES FOR FINAL COMPETITIVENESS BILL

Hon. Mark R. Kennedy | Wilson Center | April 2022

America is finally poised to begin to go on offense in the contest for technology leadership in the future. Both federal chambers have passed a bill purportedly aimed at elevating the competitiveness of the United States. The United States House of Representatives passed the America COMPETES Act on February 4, 2022, that now must be reconciled with the bill's Senate counterpart, the United States Innovation and Competition Act of 2021 that passed on June 8, 2021. There is perhaps no greater priority facing the nation than to preserve its innovative edge upon which its prosperity and security depends. Playing defense is insufficient. The final bill has the potential to put America on offense. Each bill includes a mixture of provisions not directly relevant to advancing America's competitiveness that are beyond the scope of this paper. They both include provisions vital to bolstering American innovation and sadly other provisions anathema to competitiveness. As the conference committee convenes it should retain those elements that will truly help American innovation stay a step ahead and steer clear of provisions harmful to competitiveness.

Read the full article [here](#).



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INOCULATING THE UNIVERSITY R&D ENTERPRISE: HOW RISC CAN STRENGTHEN POST-COVID-19 RESEARCH INTEGRITY AND GLOBAL SUPPLY CHAINS

*William J. Norris, Katie Vaughan-Naron, Neha Kashyap, and Joseph Balmain Rodgers
Cambridge University Press | April 27, 2022*

The COVID-19 pandemic has underscored emerging vulnerabilities in the US research and development (R&D) ecosystem. While an open and collaborative environment has been essential for advancing R&D, this approach exposes university-based R&D to a variety of security threats including state-supported efforts, attacks by malicious actors, and insufficient internal mitigation. As the pandemic led to more remote work and online collaboration, the incidence of exploitation has expanded. Increased security measures are needed to insulate and protect the R&D ecosystem, and US innovation more broadly, while maintaining the fundamental qualities that have contributed to its historical success. In this article, we present the Research Integrity Security Certification (RISC) framework. This concept preserves the autonomy of the US higher education system while also suggesting a mechanism whose effect would be a general enhancement of the security of the US university R&D enterprise with minimal additional state involvement.

Read the full article [here](#).

THE CHINA INITIATIVE WASN'T RACIST

Arthur Bloom | The American Conservative | April 27, 2022

The Biden administration's Justice Department pulled the plug on the China Initiative this February, ending a fairly successful program aimed at countering the transfer of scientific research and intellectual property to China, the first time a country has been singled out in this way. Until the move to end it, the China Initiative had been a notable point of continuity between the Biden administration and its predecessor. There was a lot happening in 2018 when the China Initiative was announced by Jeff Sessions, less than a week before he was forced out as attorney general. Sessions pointedly noted that the DOJ had charged nobody with spying for China from 2013 to 2016. In April, the New York Times reported that deputy finance chairman of the RNC Elliott Brody had worked on a convoluted scheme to force the exit from the United States of the Chinese dissident billionaire Guo Wengui via the United Arab Emirates. Brody eventually pled guilty to acting as an unregistered foreign agent for China.

Read the full article [here](#).

US STARTUPS DONATE DRONES AFTER UKRAINIAN OFFICIALS RAISE CONCERNS OVER USE OF CHINESE DEVICES

Jyoti Mann | Insider | April 23, 2022

Brinc Drones and Skydio, two US-based firms, have been donating or selling scores of drones to Ukraine, a report says. The companies stepped up after Ukrainian officials raise concerns that the Chinese drone maker DJI may have intentionally created "technical glitches" in its products to impair Ukraine's defence, according to a WSJ report. DJI has denied these claims, the outlet added. DJI, Brinc Drones, and Skydio did not immediately respond to Insider's request for comment. The news comes after Ukrainian officials called for the Chinese manufacturer to "stop doing business" with Russia last month via Twitter. Since last month, Brinc has donated 10 drones and sold an additional 50 for Ukraine's State Emergency Service to use, according to WSJ. Skydio has also donated dozens of drones to Ukraine's Ministry of Defence and sold "hundreds" to NGOs that back Ukraine, the report says.

Read the full article [here](#).



HOW HYPERSONIC MISSILES WORK AND THE UNIQUE THREATS THEY POSE – AN AEROSPACE ENGINEER EXPLAINS

Iain Boyd | *The Conversation* | April 15, 2022

Russia used a hypersonic missile against a Ukrainian arms depot in the western part of the country on March 18, 2022. That might sound scary, but the technology the Russians used is not particularly advanced. However, next-generation hypersonic missiles that Russia, China and the U.S. are developing do pose a significant threat to national and global security. I am an aerospace engineer who studies space and defense systems, including hypersonic systems. These new systems pose an important challenge due to their maneuverability all along their trajectory. Because their flight paths can change as they travel, these missiles must be tracked throughout their flight. A second important challenge stems from the fact that they operate in a different region of the atmosphere from other existing threats. The new hypersonic weapons fly much higher than slower subsonic missiles but much lower than intercontinental ballistic missiles. The U.S. and its allies do not have good tracking coverage for this in-between region, nor does Russia or China.

Read the full article [here](#).

A NEW NONPROFIT WANTS TO REWRITE THE PLAYBOOK FOR HOW THE U.S. GOVERNMENT FUNDS SCIENCE

Lev Facher | *STAT* | April 22, 2022

The Good Science Project is hoping to push the NIH and other government science agencies to be faster, bolder, and more efficient. The new nonprofit, launched this week, highlights simmering concerns among researchers and science policy experts across the country that the U.S. isn't getting its money's worth when it comes to the billions of taxpayer dollars spent each year in pursuit of new knowledge. Namely, said Stuart Buck, the new organization's executive director, agencies like the National Institutes of Health and National Science Foundation often incentivize scientists to pursue incremental research instead of transformative new discoveries. Researchers, he argued, also spend far too much time on bureaucratic tasks and not enough time in the lab. "At the highest level, we're trying to improve the funding and practice of science," Buck told STAT in an interview. "The question is: What are we getting for \$40 or \$50 billion?"

Read the full article [here](#).

HOW TO RECOGNIZE AND RESPOND TO INSIDER THREATS FROM EMPLOYEES

Megan Gates | *Society for Human Resource Management* | September 23, 2021

Transportation is a critical component of modern life, and the ability to get people and goods from one location to another is essential. The Santa Clara Valley Transportation Authority (VTA) provides bus, light rail and paratransit services for a region of Northern California that is home to Silicon Valley. Its more than 2,000 employees continued to report to work throughout the unprecedented challenges of 2020, helping customers get to where they needed to be and providing essential services to transit-dependent and disabled individuals who rely on the system for groceries, access to doctor's appointments and more. And then tragedy struck at work. Samuel Cassidy, 57, went to an early morning union meeting at one of the system's light-rail maintenance yards on May 27 and opened fire. He killed eight of his coworkers before dying by suicide as police arrived on the scene. A later investigation would find that Cassidy was unhappy with his work and held numerous grievances toward his employer and colleagues.

Read the full article [here](#).



CHINESE-BORN MATHS GENIUS LEAVES HARVARD TO HELP CHINA BECOME A POWERHOUSE ON SUBJECT

Ling Xin | South China Morning Post | April 21, 2022

World-renowned Chinese mathematician Yau Shing-Tung has announced his retirement from his position at Harvard University to teach full-time at Tsinghua University in Beijing, aiming to help China become a maths powerhouse within a decade. "This is a major decision in his life," said a colleague of Yau's from the Chinese Academy of Sciences in Beijing. Although Yau, 73, had spent a lot of time teaching for free in China in recent years, the new move means "he's ready to leave five decades of life in the US behind, and devote all his time and energy to promoting the development of maths in China," said the colleague, who did not wish to be named. Yau, who was with Harvard University since 1987 and retired as the William Caspar Graustein professor of mathematics, joins Tsinghua as a chair professor in mathematics. At his installation ceremony, attended by senior government officials and representatives of the scientific community, Yau said he wanted to "take over the torch" passed down by his late teacher and modern geometry pioneer Chern Shiing-shen, to help China cultivate young, top mathematicians at home and become a maths powerhouse in about 10 years' time.

Read the full article [here](#).

HOW TO PROTECT AI FROM CYBERATTACKS – START WITH THE DATA

Center for Security and Emerging Technology | April 22, 2022

Artificial intelligence is certainly a game-changer when it comes to security. Not only does it greatly expand the capability to manage and monitor systems and data, it adds a level of dynamism to both protection and recovery that significantly increases the difficulty, and lessens the rewards, of mounting a successful attack. But AI is still a digital technology, which means it can be compromised as well, particularly when confronted by an intelligent attack. As the world becomes more dependent on systems intelligence and autonomy for everything from business processes to transportation to healthcare, the consequences of a security breach rise even as the likelihood declines. For this reason, the enterprise should take a hard look at their AI deployments to date, as well as their ongoing strategies, to see where vulnerabilities live and what can be done to eliminate them. According to Robotics Biz, the most prevalent type of attack on AI systems to date has been the infiltration of high-volume algorithms in order to manipulate their predictive output.

Read the full article [here](#).

US UNIVERSITIES LEAD IN 28 OF 51 SUBJECTS RANKED BY QS

University World News | April 16, 2022

In terms of the number of world's top-10 programmes, the United States dominates this year's QS World University Rankings by Subject with 239, followed by the United Kingdom with 131, Switzerland (31), Singapore (23), Canada (19), Netherlands (15), Australia (13), Hong Kong Special Administrative Region (SAR) (7), France and Italy (6 each) and China (mainland) with 4. The 12th edition of the QS World University Rankings by Subject, released on 6 April by international higher education analysts QS Quacquarelli Symonds, names the world's top universities for the study of 51 academic disciplines and five broad faculty areas. The rankings provide independent comparative analysis of the performance of 15,200 individual university programmes taken by students at 1,543 universities which can be found in 88 locations across the world. The most represented study destinations in this edition for the total number of entries among the 51 subjects' tables are the United States (3,136), the United Kingdom (second with 1,465), mainland China (third with 771 entries), and Australia (fourth with 739).

Read the full article [here](#).



FEDERAL CONTRACTORS COULD SOON HAVE TO DISENTANGLE THEMSELVES COMPLETELY FROM RUSSIA

Courtney Bublé | Government Executive | April 7, 2022

Lawmakers advanced a bill on Wednesday that would limit the federal government's contracting with companies that are still operating in Russia amid its war with Ukraine. Following Russia's invasion of Ukraine in February, many companies started pulling out of Russia and Rep. Carolyn Maloney, D-N.Y., chairwoman of the House Oversight and Reform Committee, introduced a bill last month that would force federal contractors to do the same. When addressing Congress on March 16, Ukrainian President Volodymyr Zelensky thanked the United States government for the sanctions, but asked lawmakers to do more to "make sure the Russians do not receive a single penny" of American money, Maloney noted during a committee business meeting on Wednesday. "I found a loophole," Maloney said. "It's the private contracting area, procurement, for the federal government. We spent over \$640 billion a year and we traced \$28 billion of it going to Russia."

Read the full article [here](#).

NOTICE OF THE STATE ADMINISTRATION OF FOREIGN EXPERTS AFFAIRS ON THE PUBLICATION OF A TRIAL IMPLEMENTATION PROPOSAL FOR A WORK PERMIT SYSTEM FOR FOREIGNERS IN CHINA

Center for Security and Emerging Technology | April 21, 2022

Read our original translation of a 2016 PRC notice that describes the process by which "foreign experts" receive permission to work in China. The following notice is an exhaustively detailed description of the process by which "foreign experts" receive permission to work in China. The document specifies precisely what qualifications China requires of foreign experts of different grades, and enumerates and provides samples of all of the paperwork prospective Chinese employers must file on behalf of foreign employees. To the administrations of foreign experts affairs of all provinces, autonomous regions, municipalities directly under the Central Government, and sub-provincial cities; and to the Administration of Foreign Experts Affairs of the Xinjiang Production and Construction Corps: Pursuant to the decision of the Office of the Reform Auditing Commission of the State Council the "Employment Permit for Foreigners" and the "Permit for Foreign Experts Working in China" are integrated into the "Work Permit for Foreigners."

Read the full article [here](#).

THE CHINESE WAY OF INNOVATION

Matt Sheehan | Foreign Affairs | April 21, 2022

For decades, many Americans derided China as a nation of copycats incapable of creativity, let alone breakthrough innovation. Authoritarianism and central planning were thought to be naturally inimical to fresh ideas. Rapid technological advancement, many in the United States believed, required the kind of fearless, "disruptive" thinking that was most at home in a freewheeling, democratic society. Over the past several years, however, the narrative has shifted, and any complacency over U.S. technological superiority has evaporated. Business columns explaining China's seeming inability to innovate have given way to op-eds warning that it is poised to surpass the United States in strategic technologies such as artificial intelligence and 5G. Policymakers in Washington who had long been content to leave technology up to Silicon Valley are now racing to find ways to bolster U.S. technological capabilities and counter Chinese progress. But making effective technology policy requires a clear understanding of how both countries got here, and what that means going forward.

Read the full article [here](#).



ANALYTIC REFLECTION: MEASURING THE ATTRIBUTES OF OPEN AND ALL-SOURCE INTELLIGENCE

Brian Holmes | *Homeland Security Today* | June 8, 2020

Since the COVID-19 pandemic has forced some members of the U.S. Intelligence Community (IC) to change the nature of their work into a more open environment, it is an opportune time to not only learn how to operate therein, but better determine the true attributes of open source information in a more reflective manner. This valuable exercise could directly meet a suggestion posed in the 2007 Congressional Research Service (CRS) Report for Congress titled "Open Source Intelligence (OSINT): Issues for Congress," and mimic the same progression that occurs across every other type of intelligence to this day. There are some that believe that open source information, a key and expanding source of intelligence used significantly by its officers for decades, is now the preeminent type of information we should exclusively gravitate toward as professionals. It is not and should be carefully tested instead as an integral piece on a larger chessboard. Open source is easily the most voluminous and accessible type of information available, but it is also becoming the most corruptible and misleading as a result. Simultaneously, all-source intelligence – of which open source is a component – and the appropriate (evolutionary) application of analytic tradecraft therein, seems more significant now than ever before.

Read the full article [here](#).

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