



ACADEMIC SECURITY AND COUNTER EXPLOITATION PROGRAM

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THE OPEN SOURCE MEDIA SUMMARY

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PENTAGON'S AI CHIEF SAYS DATA LABELING IS KEY TO WIN RACE WITH CHINA

Colin Demarest | *C4ISRNET* | January 26, 2023

To best China in the increasingly competitive artificial intelligence game, the U.S. must dramatically boost its efforts to collect, label and sort mountains of data that will ultimately be used in machine-training regimens, the Pentagon's AI czar said. "Machine learning will not save you billets. ML will cost you billets. Why? You have to label that data," Chief Digital and AI Officer Craig Martell said Jan. 26 at the Strategy and Warfare Center Symposium in Colorado. "If we're going to beat China, and we have to beat China in AI, we have to find a way to label at scale. Because if we don't label at scale, we're not going to win." Systems or equipment with pattern-recognition capabilities or autonomy require significant amounts of previous exposure — clean, plentiful information upon which they were taught — to actually get the job done. The digital lifeblood can fuel navigation and target recognition, as is expected aboard the Army's Optionally Manned Fighting Vehicle, or OMFV, as well as maintenance predictions and improved logistics. But generating the curriculum takes resources: time, data and manpower. Martell's post, the CDAO, was established in December 2021 with the aim of expediting and expanding integration of AI and data analytics across the Defense Department.

Read the full article [here](#).

HOWARD UNIVERSITY SECURES MILITARY RESEARCH CONTRACT

Susan Svrluga | *The Washington Post* | *University World News* | January 25, 2023

Howard University has been awarded a five-year, US\$90 million contract to lead a research centre focused on technology for military systems, university and defence officials announced on Monday 23 January, the first such centre at a historically black college or university, writes Susan Svrluga for The Washington Post. The new centre, funded by the Defense Department and the Air Force, will focus on tactical autonomy technology for military systems. The investment reflects efforts by military leaders to promote and draw upon expertise that better reflects the country they are protecting – and correct biases and problems that weaken it. Howard has long been making history, Defense Secretary Lloyd Austin told a crowd gathered in the university's Founders Library, with its carved wooden panels and arched windows. "It has always been dedicated to scientific discovery and innovation," he said, naming past accomplishments in mathematics, chemistry and medicine. "Howard, once again, you're making history," he said.

Read the full article [here](#).



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REPORT ON RESEARCH COMPLIANCE VOLUME 20, NUMBER 2. CITING ‘DECEPTION,’ NOT ‘ESPIONAGE,’ JUDGE IN KU CASE IMPOSES SUPERVISED RELEASE, NOT JAIL: JANUARY 2023

Theresa Defino | Health Care Compliance Association (HCCA) | JD Supra | January 31, 2023

Since his arrest in August 2019, Feng “Franklin” Tao has published 16 “research articles” for the University of Kansas (KU), authored a book and began writing a second one. To attorneys for the associate professor of chemical engineering, these activities are further evidence that Tao’s “truly breath-taking” productivity continued at home and that he should be sentenced to no more than time served. Prosecutors, however, argued Tao was “appearing to act as if he has done nothing wrong” and said his research-related efforts demonstrated his “lack of remorse” that warranted a 30-month jail term on the sole count of making a false statement for which he was convicted in September. The government, claiming Tao’s “unreported support and affiliations call into question the validity of all of the research that he has performed” under National Science Foundation (NSF) awards, also wanted Tao to be fined \$100,000. Tried on eight charges, a jury in April found Tao, 51, not guilty on four and guilty on four.^[1]

Read the full article [here](#).

FROM CELEBRATION TO DESPAIR OVER INTERNATIONAL STUDENTS

Nic Mitchell | University World News | January 28, 2023

Just as British universities were celebrating a continuing surge in international students choosing to study in the United Kingdom, there was speculation in the national media of infighting between government departments over proposals to reduce the time foreign students can stay in the country to look for work after graduating. A year ago, British universities were in jubilant mood after smashing through the 600,000 target eight years ahead of schedule, for international students coming to the UK to study. Far from being a one-off due to the main rival English-speaking destinations for international students closing their borders to international students as a result of COVID-19 travel restrictions, the first release of figures from the Higher Education Statistics Agency (HESA) on student data for 2021-22 shows the number of international students in the UK increased by +12% overall, reaching nearly 680,000. The new total of 679,970 compares with 605,130 for 2020-21 and was driven largely by a surge in demand for postgraduate taught courses, particularly the one-year masters degrees offered by UK universities.

Read the full article [here](#).

AMERICA’S CHINA POLICY IS NOT WORKING

Henry M. Paulson, Jr. | Foreign Affairs | January 26, 2023

For all the talk of how we have entered a new global era, the last year bears a striking resemblance to 2008. That year, Russia invaded its neighbor, Georgia. Tensions with Iran and North Korea were perennially high. And the world faced severe global economic challenges. One notable difference, however, is the state of Chinese-U.S. relations. At that time, self-interested cooperation was possible even amid political and ideological differences, clashing security interests, and divergent views about the global economy, including China’s currency valuation and its industrial subsidies. As Treasury secretary, I worked with Chinese leaders during the 2008 financial crisis to forestall contagion, mitigate the worst effects of the crisis, and restore macroeconomic stability. Today, such cooperation is inconceivable. Unlike during the financial crisis, the COVID-19 pandemic failed to spark Chinese-U.S. cooperation and only intensified deepening antagonism. China and the United States jab accusatory fingers at each other, blame each other for bad policies, and trade barbs about a global economic downturn from which both countries and the world have yet to recover.

Read the full article [here](#).



TIME TO REFORM ACADEMIC PUBLISHING

Thaddeus Potter and Michael Walls | *Issues in Science and Technology* | Winter 2023

In “Public Access to Advance Equity” (*Issues*, Fall 2022), Alondra Nelson, Christopher Marcum, and Jedidah Isler touch on the many reasons why open access to federal research is critical and highlight some of the challenges to come. We wholeheartedly agree with their sentiment—“A research ecosystem where everyone can participate and contribute their skills and expertise must be built”—and we applaud both the Biden administration and the White House Office of Science and Technology Policy (OSTP), where the authors work, in their commitment to make federally funded research open to the public. In particular, as graduate, professional, and medical students, we have been shaped by the relics of an inequitable publishing model that was created before the age of the internet. Our everyday work—from designing and running experiments to diagnosing and treating patients—relies on the results of taxpayer-funded research. Having these resources freely available will help to accelerate innovation and level the playing field for smaller and less well-funded research groups and institutions.

Read the full article [here](#).

CONDUCTING OPEN SOURCE DUE DILIGENCE FOR SAFEGUARDING RESEARCH PARTNERSHIPS

Innovation, Science and Economic Development Canada | *Government of Canada* | 2022

This guide is designed to help any individual looking to identify, assess, and manage risks to research, especially risks arising from partnerships. As such, the guide is written in a way that it can be understood and apply to any and all audiences; some content may be more or less useful to each individual based on their unique situation. The guide draws on methods from Open Source Intelligence (OSINT), an intelligence discipline that collects and analyses public information to support decision-making; for this guide, we term this open source due diligence. By helping you bring structure to your thinking and approach, open source due diligence methods make the online world more discoverable. While the majority of research partnerships are transparent and provide mutual benefits to all research partners, some activities by foreign governments can pose real national security risks. This guide will provide you with tools and techniques to identify these risks to research partnerships.

Read the full article [here](#).

OTTAWA URGED TO ISSUE DIRECTIVE TO UNIVERSITIES HALTING JOINT RESEARCH WITH CHINESE MILITARY SCIENTISTS

Robert Fife and Steven Chase | *The Globe and Mail* | January 30, 2023

The Official Opposition called on the federal government Monday to ban research partnerships with Chinese military scientists and issue a ministerial order to advise provinces and Canadian universities to do the same. Conservative foreign affairs critic Michael Chong accused Ottawa of being “completely asleep at the switch” when it comes to protecting national security and intellectual property, after *The Globe and Mail* reported that 50 Canadian universities have conducted extensive research with China’s military since 2005. The *Globe* reported Monday that the joint projects with China’s National University of Defence Technology (NUDT) included research on topics such as quantum cryptography, photonics and space science. Some of the Chinese military scientists who were involved are experts in missile performance and guidance systems, mobile robotics and automated surveillance. In the past five years, academics at 10 of Canada’s leading universities published 240 joint papers with NUDT, which reports directly to the Chinese Communist Party’s Central Military Commission and is the prime research institution for the People’s Liberation Army (PLA).

Read the full article [here](#).



STUDY UNCOVERS WIDESPREAD UNETHICAL PRACTICE FOR ASSIGNING AUTHORSHIPS TO RESEARCH PAPERS

University of Copenhagen | Phys.org | January 25, 2023

A recently published survey study of Ph.D. students reveals that an ethically questionable culture for assigning authorships to research papers is widespread within the medical and natural sciences across Europe. Under the hashtag #pleasedontstealmywork, dozens of Danish Ph.D. students shared their experiences last spring concerning powerful researchers who use their position to gain co-authorships on papers to which they have not made a significant contribution. A new international study led by researchers from the Department of Food and Resource Economics (IFRO) and the Department of Science Education (IND) at the University of Copenhagen now shows that these stories were only the tip of the iceberg.

Read the full article [here](#).

TOWARD A NEW MULTILATERAL EXPORT CONTROL REGIME

Sujai Shivakumar, Charles Wessner, and Hideki Uno | Center for Strategic and International Studies | January 10, 2023

Reflecting the intensifying strategic competition between the United States and China, the U.S. Department of Commerce's Bureau of Industry and Security (BIS) recently announced new export control regulations aimed at restricting China's ability to obtain, design, and manufacture certain high-end semiconductor devices used in artificial intelligence (AI), supercomputing, and related defense applications. The new regulations reflect a dramatic shift in U.S. policy in that they prohibit the export of semiconductor manufacturing equipment containing U.S. components that would enable Chinese firms to produce advanced semiconductors smaller than 14 nanometers in size. By imposing strict controls on a narrow list of technologies—often referred to as a "small yard, high fence" strategy—the U.S. government seeks to halt or at least delay the development of an advanced semiconductor industry in China.

Read the full article [here](#).

INDUSTRIAL ESPIONAGE: HOW CHINA SNEAKS OUT AMERICA'S TECHNOLOGY SECRETS

Nicholas Yong | BBC News | January 16, 2023

It was an innocuous-looking photograph that turned out to be the downfall of Zheng Xiaoqing, a former employee with energy conglomerate General Electric Power. According to a Department of Justice (DOJ) indictment, the US citizen hid confidential files stolen from his employers in the binary code of a digital photograph of a sunset, which Mr Zheng then mailed to himself. It was a technique called steganography, a means of hiding a data file within the code of another data file. Mr Zheng utilised it on multiple occasions to take sensitive files from GE. GE is a multinational conglomerate known for its work in the healthcare, energy and aerospace sectors, making everything from refrigerators to aircraft engines. The information Zheng stole was related to the design and manufacture of gas and steam turbines, including turbine blades and turbine seals. Considered to be worth millions, it was sent to his accomplice in China. It would ultimately benefit the Chinese government, as well as China-based companies and universities.

Read the full article [here](#).

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