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# Worrying About Artificial Intelligence Starting a Nuclear War: Eye on A.I.

By Jonathan Vanian

8-10 minutes

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An organization that [won the Nobel Prize](#) in 2017 for its work to eliminate nuclear weapons is sounding the alarm about the possibility of artificial intelligence leading to unintended wars.

Beatrice Fihn, executive director of the International Campaign to Abolish Nuclear Weapons, is worried that hackers could breach A.I. technologies that are used in nuclear programs or that they could use A.I. to dupe countries into launching attacks. For example, deepfakes, or realistic-looking computer-altered videos, may be used to “create a perceived threat that might not be there,” she warns, prompting governments to overreact.

Fihn told *Fortune* that she wants to convene a meeting in the fall with nuclear weapons experts and some of the leading companies in A.I. and cybersecurity. Participants in the off-the-record event, she said, would produce a document that her group would use to inform governments and others about the danger.

“Some companies are more powerful than governments today in terms of shaping the world,” Fihn said. She wants to “engage them in thinking about how they can contribute to a more sustainable world, one that reduces the threat of extinction.”

So far, some leading companies in A.I. including [Microsoft](#) and Google's DeepMind A.I. unit have expressed interest, Fihn said. Microsoft and DeepMind declined to comment to *Fortune*.

She said that some companies are "a little bit intimidated by the issue," believing it to be "very political." That said, she thinks these companies recognize their power.

A.I. is often described as a huge benefit to humanity, potentially leading to more effective healthcare treatments or reducing auto accidents with the help of self-driving cars. But there is also a darker counter narrative that it can also be used by criminals and, possibly, by nation states to sabotage adversaries.

"We don't want to advocate for any restrictions on A.I.," Fihn said. "But this technological development is happening—we have to be very careful."

Fihn, who is from Switzerland, cautions that the secrecy involved in nuclear programs makes it difficult to know just how much A.I., if any, has been incorporated into them. What is known, however, is that A.I. can be used to target nuclear arsenals or the people who manage them.

"This is new stuff for us to think about," Fihn said. Does the rise of A.I. pose realistic dangers, "Or is our imagination going wild?"

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**EYE ON A.I. NEWS**

**The A.I. eyes are watching you. Walmart** is using artificial intelligence in over 1,000 stores to deter potential thieves from running outside without paying, Business Insider [reported](#). With the help of store cameras, Walmart’s “Missed Scan Detection” software can recognize and notify human clerks if shoppers try to slip items past checkout scanners without paying.

**Animal house.** Companies like **Apple**, **Google**, and **Facebook** are hiring animal researchers with computer science skills in order to improve their A.I.-powered products, Bloomberg News [reports](#). The article describes how one researcher who studied birdsongs “joined Google’s sound-understanding group, where he creates sound-recognition systems as sophisticated as the company’s image-recognition software, capable of distinguishing a siren from a crying baby.”

**Out of Africa.** The *MIT Technology Review* [explores](#) some of the A.I. research coming out of Africa, where companies like **IBM** and **Google** have opened A.I. labs. The article posits that A.I. research emerging from Africa could lead to the creation of “technology that tackles pressing global challenges like hunger, poverty, and disease.” This contrasts with A.I. research in wealthy locations like Silicon Valley, where A.I. developments are often used to improve tech products.

**Auto alliance.** **Waymo**, the self-driving car subsidiary of **Google** parent **Alphabet**, said it [partnered](#) with auto giants Renault and Nissan to explore the use of Waymo’s autonomous vehicles in France and Japan. The announcement was light on details, but said that the alliance would lead to an “initial period to explore all aspects of driverless mobility services for passengers and deliveries in France and Japan.”

## TOOL TIME

One way companies can attract and retain data scientists is by having the correct data-crunching tools for them to work with, according to industry publication [Dataconomy](#). **Eva Murray**, the head of business intelligence for the German database company **Exasol**, writes: “You wouldn’t expect a heart surgeon to be able to carry out their job properly or effectively if they didn’t have the right tools or equipment available to them in the operating room. It’s the same for data scientists.”

## EYE ON A.I. HIRES

Software consulting firm **Centare** [picked](#) **Joe Anderson** to be its director of data science. Anderson previously oversaw data science and analytics for healthcare company **Optum**.

**DataRobot**, a startup specializing in machine learning tools, [added](#) **New Enterprise Associates** venture partner **Hilarie Koplow-McAdams** to its board. Koplow-McAdams was once the chief revenue officer and president of enterprise software company **New Relic**.

**ASRC Aerospace Corporation** has [chosen](#) **John F. Walsh III** to be its chief technology officer and chief information officer. Walsh was previously the senior vice president and general manager for the information technology solutions market segment at defense contractor **Science Applications International Corporation**.

## EYE ON A.I. RESEARCH

**A.I. won’t eliminate the need for radiologists.** Despite several studies detailing A.I.’s effectiveness in scanning radiology images,

a prominent radiologist says the technology won't replace humans in diagnosing disease any time soon. **Judy Gichoya**, an interventional radiology fellow at the **Dotter Institute at Oregon Health and Science University**, joined the [This Week in Machine Learning & AI podcast](#) to discuss a recent [paper](#) she co-wrote about popular misconceptions regarding radiology and A.I.

She discussed a high-profile paper about A.I. besting humans at using radiology to diagnose pneumonia, noting that A.I.-powered radiology-scanning systems can miss many types of pneumonia. For instance, scans of HIV patients may not show signs of pneumonia despite the patients having the disease.

Additionally, Gichoya said that A.I. radiology studies often allow A.I. systems to diagnose diseases based on a probability that's quantified via a percentage, whereas human radiologists in the studies often can only essentially say either "yes" or "no" when diagnosing an illness. This inherent discrepancy makes it difficult to compare the accuracy of A.I. systems versus humans.

## **FORTUNE ON A.I.**

[Artificial Intelligence Is About to Make Ransomware Hack Attacks Even Scarier](#) – By Bernhard Warner

[Wall Street Is Taking Cues From Silicon Valley to Innovate Fintech](#)  
– By Aric Jenkins

[Bank of America CEO: 'We Want a Cashless Society'](#) – By Rey Mashayekhi

## **BRAIN FOOD**

**The A.I. landlord.** *Fortune's* Shawn Tully [profiles](#) **Amherst**

**Holdings CEO Sean Dobson**, who is using machine learning to help his team add 1,000 homes a month to the company's investment portfolio. The company still relies on humans to scout cities and neighborhoods for potentially profitable "fixer-uppers." Then it uses machine learning to sift through the town's homes to find the gems.

For each "first cut" listing, Explorer estimates the costs of renovation. This is machine learning at work: The estimate is based on Amherst's experience with homes of similar age and size in the same or nearby neighborhoods. In an older home, this might include replacing the HVAC system; for one whose listing photos suggest wear and tear, it might include a new roof. (Team members help the software make that call.) Explorer has become so precise, Negri says, that the actual renovation costs average within 5% of the estimates.