New Pentagon-Google Partnership Suggests AI Will Soon Be Used to Diagnose Covid-19

Google recently teamed up with the Pentagon as part of the new, AI-driven "Predictive Health" program. Though only focused on "predictive cancer diagnoses" for now, Google and the military have apparent plans to expand the AI model for automating and predicting Covid-19 diagnoses.



BY WHITNEY WEBB SEPTEMBER 17, 2020 10 MINUTE READ



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At the beginning of September, Google Cloud <u>announced</u> that it had won a project from the Pentagon's relatively new <u>Defense Innovation Unit</u> (DIU) to "prototype an AI-enabled digital pathology solution at select DoD [Department of Defense] facilities." This prototype, per <u>a Google Cloud press release</u>, combines "augmented reality telescopes" with "AI-enabled" cancer detection tools that will allegedly improve the accuracy of "predictive cancer diagnoses." It is the second DIU contract Google <u>has won</u> this year, with the first being related to combatting "cyber threats."

The initial implementation of this Pentagon-funded, Google-created "digital pathology solution" will take place "at select Defense Health Agency (DHA) treatment facilities and Veterans Affairs hospitals in the United States," and the program includes "future plans to expand across the broader U.S. Military Health System," <u>according to Google</u>.

The initiative is part of a larger DIU-led program called "Predictive Health" that is <u>also partnered</u> with the joint AI effort of the US military and US intelligence community, the Joint Artificial Intelligence Center, and JAIC's "Warfighter Health" initiative. The JAIC, which is <u>currently led</u> by a former Silicon Valley executive, is providing much of the funding for Predictive Health, while <u>its related "Warfighter Health" initiative</u> more broadly seeks "to field AI solutions that are aimed at transforming military health care."

In addition to its stated goal of improving the accuracy of cancer diagnoses, the implementation of this Google-DIU AI-driven medical diagnosis tool aims to show "frontline health practitioners" that such tools "can improve the lives" of US troops, according to Google executives. As Mike Daniels, vice president of Global Public Sector at Google Cloud, noted in a statement, Google is "partnering with DIU to provide our machine learning and artificial intelligence technology to help frontline healthcare practitioners learn about capabilities that can improve the lives of our military men and women and their families." Google also stated that the use of their tool at military health facilities would also "lower overall healthcare costs."

The Google-DIU effort to outsource human doctor decision-making to a tailor-made artificial intelligence algorithm is, for now, only focused on the diagnosis of cancers. However, last Thursday, less than two weeks after winning the DIU contract, Google announced that it was <u>donating \$8.5 million</u> to several organizations to advance the development and use of AI "for monitoring and forecasting" Covid-19. That money is part of a larger \$100 million donation from Google for financing "solutions" to Covid-19 that was announced in May.

Further evidence that Google soon plans to offer AI-driven "predictive diagnoses" for Covid-19 came in August, when Google Cloud <u>partnered with</u> Harvard's Global Health Institute to provide "Covid-19 Public Forecasts," which "provide a projection of Covid-19 cases, deaths, and other metrics over the next 14 days for US counties and states." The announcement of the Google-Harvard collaboration coincided with <u>an announcement</u> from the National Institutes of Health (NIH) would begin "harness[ing] AI for COVID-19 diagnosis, treatment, and monitoring."

Notably, other tech companies that have produced "predictive diagnosis" AI models for Covid-19 also began first by offering AI-created "forecasts" of "likely" Covid-19 outbreaks. For instance, the Israeli intelligence—linked Diagnostic Robotics initially offered AI-driven predictive "forecasts" of cities and districts to guide lockdown policy in Israel and the US state of Rhode Island before then teaming up with the US-based company Salesforce to develop a platform that uses AI to "predict" which individuals are likely to be diagnosed with Covid-19 and then uses AI to monitor and even "treat" those individuals.

Furthermore, in partnership with researchers at Mount Sinai healthcare centers in New York, tech giant Microsoft has already aided the development of an AI algorithm that "<u>rapidly diagnoses</u>" Covid-19. Mount Sinai's AI model, supported by <u>a recent grant</u> from Microsoft's "AI for Health" initiative, "was as accurate as an experienced radiologist in diagnosing the disease," according to one of the lead researchers behind the model's development. While its development was aided by Microsoft, the core of the Mount Sinai AI model is TensorFlow, which was developed by Google and is Google AI's second-generation system for machine learning.

In addition, both <u>Google and Microsoft</u> are part of a Europe-based effort aimed at "automating diagnoses" for Covid-19 via an AI algorithm that analyzes CT scans, which is similar in several ways to the Mount Sinai AI model. Thus, it seems highly likely that Google's efforts to offer AI-powered "predictive diagnoses" will soon expand to include tools that use algorithms to diagnose Covid-19, not just cancer.

The Merging of the Pentagon, the CIA, and Silicon Valley

Established in 2015, the <u>Defense Innovation Unit</u> of the Department of Defense officially exists to transfer "leading-edge commercial capabilities to the military faster and more cost-effectively than traditional defense acquisition methods" and to accelerate "the adoption of commercial technology throughout the military and [grow] the national security innovation base." As the DIU makes clear on its website, the "national security innovation base" it seeks to "grow" consists of private tech companies, namely those based in Silicon Valley, that provide "advanced commercial solutions" to "national security challenges." This, of course, includes the tech companies that already double as contractors for the national security state, such as Google, Microsoft, and Amazon, among numerous others.

The DIU boasts offices in Silicon Valley, Boston, Austin, and at the Pentagon itself and is largely led, not by career military men, but by former Silicon Valley executives. For instance, its current director—Michael Brown—is the former CEO of cybersecurity giant Symantec and, prior to that, led the Quantum corporation. In another example, the leader of the DIU's artificial intelligence portfolio is Jeff Klugman, a former top executive at TiVo, the Quantum corporation, and Hewlett-Packard.

A year after the DIU was created, it was followed by the <u>Defense Innovation Board</u> (DIB), which is composed of "leaders from across the national security innovation base" and provides recommendations that "have been used to inform DoD leadership strategy and action, as well as congressional legislation." Like the DIU, Silicon Valley is well represented on the DIB, as <u>its members include</u> former Google CEO Eric Schmidt and LinkedIn founder Reid Hoffman as well as top executives from Google, Microsoft, and Facebook.

Notably, just months before the DIU-led Predictive Health program was launched, the DIB <u>noted in March 2020</u> that the Pentagon "owns the largest repository of disease- and cancer-related medical data in the world," asserting further that "if the entire repository were leveraged to its fullest potential, it would advance diagnosis and treatment for thousands of illnesses, saving lives across DoD and the global population." The DIB then specifically suggested that "artificial intelligence and machine learning models may help pathologists sort through this massive dataset more quickly and effectively to provide better care for patients in and out of the military," adding that these troves of medical data should be used "to support DoD reform and modernization efforts in the field of AI/ML [Artificial Intelligence / Machine Learning]."

In other words, the Silicon Valley–dominated DIB called for what is now the Predictive Health program just months before the Silicon Valley–dominated DIU formally announced it. Also noteworthy is that Google—whose former CEO, current vice president, and several other Google-tied researchers and businessmen serve on the DIB—is the very company that won the DIU contract to have its AI models serve as the foundation for the Predictive Health program. This, of course, means that Google's AI models will benefit immensely from the Pentagon's "unique" and massive medical datasets, which the DIB previously stated was something that the Pentagon "must treat . . . as a strategic asset."

It is also important to point out the considerable overlap between the Pentagon's Defense Innovation Board and the National Security Commission on Artificial Intelligence. The NSCAI is <u>chaired by</u> Eric

Schmidt (also on the DIB) and includes representatives from Google, Microsoft, Facebook, and Amazon as well as the current and former leaders of the CIA's In-Q-Tel.

The official purpose of the NSCAI is "to consider the methods and means necessary to advance the development of artificial intelligence, machine learning, and associated technologies to comprehensively address the national security and defense needs of the United States." As I <u>previously reported</u> for *The Last American Vagabond*, the vice-chair of NSCAI, <u>Robert Work</u>—former Deputy Secretary of Defense and senior fellow at the hawkish <u>Center for a New American Security (CNAS)</u>—described the <u>commission's purpose</u> as determining "how the U.S. national security apparatus should approach artificial intelligence, including *a focus on how the government can work with industry to compete with China's 'civil-military fusion' concept* [my emphasis]."

For this reason, the NSCAI unites the US intelligence community and the military, which is already collaborating on AI initiatives via the Joint Artificial Intelligence Center and Silicon Valley companies. Notably, many of those Silicon Valley companies—like Google, for instance—are not only contractors to US intelligence, the military, or both but were <u>initially created</u> with funding from the CIA's In-Q-Tel, which also has a considerable presence on the NSCAI. Thus, while the line between Silicon Valley and the US national-security state has always been murky, now that line is essentially nonexistent as entities like the NSCAI, DIB, and DIU, among several others, clearly show. Whereas China, as Robert Work noted, has the "civil-military fusion" model at its disposal, the NSCAI and the US government respond to that model by further fusing the US technology industry with the national-security state.

It is also certainly interesting that, just like the DIB, the NSCAI called for what would become the DIU's Predictive Health program a few months before it was formally announced. In a NSCAI paper from June 2020 titled "The Role of AI Technology in Pandemic Response and Preparedness: Recommended Investments and Initiatives," the commission recommends investments and initiatives aimed at using AI for diagnosing illnesses, including Covid-19. This seems to suggest that the Silicon Valley—led but Pentagon-housed DIU is the body that actually creates the government-industry partnerships and initiatives that are first planned out by the DIB and the NSCAI.

It's All About the Data

While Google has stated that one of their main goals in participating in the Predictive Health program is showing health-care practitioners how AI can "improve lives," the DIU was decidedly more direct regarding their intent in implementing this "predictive diagnosis" program. For instance, an article on the Google-DIU pilot program at <u>DefenseOne</u>, citing military officials, notes that the "enormous amount of healthcare data, unique to the Department of Defense, also presents a rare opportunity for the Department to train new machine learning tools." It then adds that "there are 9.6 million beneficiaries in the Defense Health System, which means a lot of data to improve the accuracy of [AI] models."

DIU's chief medical officer, Niels Olsen, who created the Predictive Health program, recently stated that massive quantities of data planned to be obtained by the program and used for developing improved AI algorithms was a critical component of the project. In a Pentagon press release, Olsen stated that "the more data a tool has available to it, the more effective it is. That's kind of what makes DOD unique. We have a larger pool of information [i. e., medical data] to draw from, so that you can select more diverse cases."

Thus, the implementation of the Predictive Health program is expected to amass troves upon troves of medical data that offer both the DIU and its partners in Silicon Valley the "rare opportunity" for training new, improved AI models that can then be marketed commercially. This may explain part of the interest in partnering this initiative with the Defense Health Agency (DHA), which "owns the largest repository of disease- and cancer-related medical data in the world" through its management of the Joint Pathology Center, which was noted by the DIB in its March 2020 publication. In addition, as previously mentioned, Google will now be able to access that trove of sensitive data to refine its AI "health-focused" algorithms, thanks to it having won the DIU contract earlier this month.

Notably, the relatively new Predictive Health program builds on past DIU initiatives, such as an AI algorithm that predicts illnesses "48 hours before symptoms show." That algorithm was developed by the Defense Threat Reduction Agency, the DIU, and the health IT company Royal Phillips. The Phillips team that developed that algorithm is now "refin[ing] the model at military hospitals and clinics managed by the Veterans Affairs Department." According to the DTRA's Edward Argenta, the <u>focus of the program</u> is to eventually use the AI algorithm to analyze data from devices that remotely monitor individual health, specifically "a wearable device that might sit on your body—like a watch-based one or a chest strap one."

While various "innovation-focused" agencies at the Pentagon have been busy developing their own algorithms after harvesting mass amounts of medical data from military members and their families, a web of intelligence-linked tech companies, including those represented on the DIB and NSCAI, have gained access to the jackpot of medical data through partnering with the "Covid-19 Healthcare Coalition."

According to its website, the Covid-19 Healthcare Coalition was established as "a coordinated public-interest, private-sector response to the Covid-19 pandemic, convening healthcare organizations, technology firms, nonprofits, academia, and startups." The coalition, which was launched by the intelligence and defense contractor MITRE, also includes tech giants like Google, Microsoft, Palantir, Salesforce, and Amazon and allows its member organizations to "collaborate, collect, analyze, visualize, and share data and insights." With access to the data from partnered health-care institutions, such as the Mayo Clinic and the Cedars-Sinai Health System, these tech companies are "helping" the coalition "unlock large-scale analytics for Covid-19." Institutions tied to the US government, and the NSCAI in particular, such as the CIA's In-O-Tel, are also members of the Covid-19 Healthcare Coalition.

Notably, the recent advances in US-based efforts to "predict" or "automate" Covid-19 diagnoses are all tied to this very coalition. Indeed, all of the companies and institutions mentioned thus far in this report have engaged in developing these tools, as Diagnostic Robotics, Salesforce, Google, Microsoft, Amazon, and Mount Sinai Medical Center are all coalition members.

Google, in the press release regarding its recent partnership with the DIU, noted that the prototype of the AI model set to make "predictive cancer diagnoses" had been "developed from [unspecified] public and private datasets," making it possible—if not likely—that the private datasets were obtained through Google's membership in this massive, yet relatively unknown, coalition of health-care institutions, tech companies, and US intelligence—linked entities like MITRE and In-Q-Tel.

This apparent obsession with medical data may explain the <u>dramatic uptick in hacks of hospitals</u> in the United States, which have been considerable in recent months and have largely targeted patient data. It is worth pointing out that the increase in these attacks seeking patient data coincides with the DIB-NSCAI policy recommendations regarding training AI algorithms on troves of medical data for automated and predictive diagnoses, among other applications.

Notably, the "solutions" offered to many of the health-care institutions that have been hacked have come from government-promoted yet opaque groups that are deeply tied to US and allied intelligence agencies as well as Silicon Valley. These "volunteer groups," such as "the CTI League" and "the Cyber Alliance to Defend Our Healthcare," offer their services for free but, notably, gain access to the patient data they are tasked with guarding. Are such groups, given their deep ties to Silicon Valley and intelligence agencies, helping acquire even more data to satisfy the Silicon Valley and national-security state's endless hunger for more and more data?

AI COVID-19 cyber Google microsoft Pentagon Predictive



Author Whitney Webb

Whitney Webb has been a professional writer, researcher and journalist since 2016. She has written for several websites and, from 2017 to 2020, was a staff writer and senior investigative reporter for Mint Press News. She currently writes for The Last American Vagabond.

10 comments

Regina says: September 18, 2020 at 2:43 am

Marvelous work Whitney.

It's Nazism with orders of magnitude more tools, power and reach.

And it's giving me nightsweats.

Thank you for your indefatigable efforts to uncover what is happening.

Regina

Reply



September 18, 2020 at 12:49 pm

Listened to the podcast with Dr. Nash. Is there a written version I might share on FB?

Reply

Youri Smouter says: September 18, 2020 at 5:28 pm

Thanks Ms. Webb for this truthbomb/mic drop. If anyone saw John Pilger's documentary and his second one about the assault on the NHS in England which is pretty much non-existent now well one of the "buisness" innovators who they privatized a NHS hospital with later got into some AI thing where you call a doctor and what not explain your symptoms and they give you the diagnosis. many are warning this is junk medical stuff and you can't replace AI/machine unlike an actual doctor meeting the patient person to person but in this world where the dark farces are only getting darker, one should be VERY AFRAID of where we are heading.

Levi says: September 18, 2020 at 7:17 pm

Highly recommend anyone keenly interested in furthering their knowledge on this type of activity to read Shoshana Zuboff's The Age of Surveillance Capitalism. It delivers an extensive, in-depth explanation of the unprecedented economic logic and power wielded by the surveillance capitalists of Silicon Valley as well as their obvious mutual agendas with the National Security state/Pentagon to shape a new world based on predictive power of people's behavior in order to surreptitiously manipulate and shape people's behavior for the commercial interests of Silicon Valley and the national security interests of the 'Deep State'.

Reply

Bata says: September 18, 2020 at 8:47 pm

Dear Whitney, thank you for your amazing work.

Question: Because of so many information these days: Could you not summerise a conclusion in short version what your articll is about?

:)) Reply

Reply

Marshalldoc says: September 19, 2020 at 7:55 pm

As always Whitney, excellent work. Thank you.

So, I'm left with the question of 'what's the upshot?'

Naively one could posit an humanitarian desire to improve 'distance' healthcare for the benefit of all humanity. But, since that's never been the intent of the capitalist megastructure, I'm wondering if this is not part of the 'Great Reset' and a means of doing away with 'legacy' healthcare methods & the institution of 5G-dependent 'distance healthcare' as a means of reducing the overall costs of healthcare delivery & increasing profits for the digital providers.

Any comments? Reply



Pavol says: September 20, 2022 at 3:29 pm Look into impact financing, social impact bonds, Rockefeller's Commons project, etc. They're laying down an infrastructure for a digital blockchain prison.

Reply



George says: September 20, 2020 at 1:40 pm

This can only end badly...

Reply

Kym says: September 21, 2020 at 8:05 pm

Very informative article Ms. Webb, thank you for your dedicated and truthful work. I would like to receive your future articles in my email if possible. Thank you.

Reply



sgt_doom says:
September 30, 2021 at 3:38 am

Fsntastic article, Ms. W!!!

Too scary to comment on at the moment —- definitely do not care for this trajectory and am highly wary of a guy who has weekly meetings with Henry Kissinger, advisor to Xi Jinping —- namely, Eric Schmidt! Reply