NEWS

Tech pitches in to fight COVID-19 pandemic

A growing number of tech companies and IT pros are working in a variety of ways to help fight the ongoing coronavirus pandemic. Here's a rundown of what some of them are doing to help fight COVID-19.



By Ken Mingis

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As IT pros around the world go all-out to support a workforce that's suddenly fully remote, many technology workers and companies are also joining efforts to alleviate the COVID-19 crisis in various ways, including developing products to combat the virus, tracking and predicting its spread, and protecting hospitals from cyberattacks.



ViewSonic offers to help distance-learning efforts

ViewSonic is offering up its Professional Development team to provide one-on-one online support for educators "with any learning initiatives they may have, including topics such as: distance learning as a whole, tools for distance learning, curriculum development, as well as video creation or conferencing for lessons," the company said in a statement.

"Remote and distance learning lessons are definitely different than inside the confines of a classroom," said Blake Everhart, solution training manager at ViewSonic Americas. "As a former teacher, I understand there's sometimes a gap between learning the scope and sequence of the technology side that can match up with the lessons you want to teach. The ability to create and complete lessons, and how to filter through the many resources that are out there makes it tough to focus. That's why my team and I at ViewSonic are making ourselves available to help out and make things less overwhelming."

Educators who need help can seek it online here. The initative is free through June.

Salesforce touts Work.com for post-pendemic return to biz

disruptions caused by the COVID-19 outbreak.

"Work.com brings together the full power of health experts, business leaders and the Salesforce ecosystem in a resource center informed by the Business Roundtable and the University of California San Francisco (UCSF) with insights from business, health and government leaders as well as analysis, best practices and recovery stories from our trusted partner ecosystem," the company said in a statement.

The goal: "...help business and community leaders around the world reopen safely, re-skill employees and respond efficiently on the heels of the COVID-19 pandemic."

Salesforce said the effort involves everything from <u>contact tracing to emergency</u> <u>response management and employee wellness</u>; The company also launched <u>Salesforce Care</u>, a free-for-90-days suite of solutions to help businesses stabilize amid the initial phase of the pandemic.

Arc launches 'Code Against COVID-19' effort

Developers in the Codementor and Arc communities, which include more than 500,000 developers across the globe, are offering to help with projects designed to combat the coronavirus pandemic. The goal of "Code Against COVID-19" is to connect organizations in need of development help for their projects directly with mentors and freelance developers, Arc said.

More than 200 developer volunteers have signed up for the effort and are working on more than 20 different projects, Arc said.

"We believe software can help combat this global pandemic, and that's why we're launching the Code Against COVID-19 initiative...," said Weiting Liu, founder and CEO of Arc. "From tracking outbreaks and reducing the spread to scaling testing and supporting healthcare, teams around the world are using software to flatten the curve. The eMask app (real-time mask inventory in Taiwan) and TraceTogether (contact tracing in Singapore) are just two of the many examples."

Coding Dojo's 'Tech for America' now has 190 volunteers

Tech education firm Coding Dojo has <u>mobilized a network of more than 4,500</u> <u>alumni</u> to offer web and software development services on a volunteer basis.

"No one knows when society will go back to normal, but there is comfort to be found in that uncertainty," said Coding Dojo CEO Richard Wang. "We're all in this together, even if we're isolated from one another. We hope Techfor America helps small businesses survive COVID-19 and believe programs like this will help us grow stronger as communities and as a country."

Businesses needing help are should send an email to techforamerica@codingdojo.com or fill out this Google Form. Once the request is submitted, organizations can be paired with volunteers based on locality, technology proficiency needed for a given project, and other factors.

The effort, which began in early April, now has 190 volunteers from 30 states and 11 countries. New volunteers can sign up using this <u>Google Form</u>.

Verizon Media offers devs new tools for COVID-19 data queries

Verizon Media unveiled three new resources for developers and data teams to help them better organize and understand publicly available COVID-19 data. The resources – a dataset, API, and dashboard that help engineers analyze and navigate COVID-19 data – are powered by the Yahoo Knowledge Graph.

"...Given the high volume of information, data and figures released daily, one way we can help is to play a role in organizing the content that exists, while also sharing our technology that allows us to create informative and interactive visualizations of the data available about this virus," Guru Gowrappan, CEO of Verizon Media, said in a statement.

by country, state and county level.

The information is compiled from government websites and healthcare organizations such as the WHO. The company also launched an API developers can use to explore the dataset and build their own coronavirus charts, simulations, and applications.

Earlier, the company responded to the <u>COVID-19 Open Research Dataset</u>

<u>Challenge (CORD-19)</u> challenge from Kaggle and created another instance of the data set for queries.

"We thought the best way to help was to index the dataset, which includes over 44,000 scholarly articles, and to make it available for searching via Vespa Cloud," the company said in a statement. "Now live at https://cord19.vespa.ai, you can get started with a few of the sample queries or for more advanced queries, visit CORD-19 API Query."

The index is designed to allow medical professionals and researches to have quick access to information about the coronavirus. Details about how to contribute to that effort are available on github.

Bill Gates offers a pandemic battle plan

Former Microsoft CEO Bill Gates <u>weighed in on his GatesNotes site</u> with a lengthy description of what he sees is needed to fight the pandemic, arguing that innovation will be critical to stemming the damage from COVID-19.

"I see global innovation as the key to limiting the damage," Gates wrote. "This includes innovations in testing, treatments, vaccines, and policies to limit the spread while minimizing the damage to economies and well-being....

"...During World War II, an amazing amount of innovation, including radar, reliable torpedoes, and code-breaking, helped end the war faster," Gates wrote. "This will be the same with the pandemic. I break the innovation into five categories:

or stop the virus."

The lengthy document offers detailed descriptions of what's needed and is <u>available</u> for download as a PDF.

The Gates Foundation also offers a wealth of information about the pandemic.

USO goes virtual with aid from Verizon Media

The USO, long known for its live celebrity tours at military installations has gone virtual so the shows can go on – at least online. The USO suspended its trademark shows in MArch, as the COVID-19 pandemic worsened.

"The USO has always been by the side of our military and their families, and COVID-19 does not change this," said Alan Reyes, the organization's chief operating officer. "...With the help of military supporters, the entertainment industry and USO partners, we are providing virtual engagements and programming to boost morale during the pandemic...."

The USO's new virtual programming offers celebrities who conduct "virtual base visits" and make one-on-one calls with service members; pre-screening events; online workshops and classes; Q&As; and digital subscriptions for service members and military families. The current setup is expected to run through June.

Verizon Media is donating its digital media streaming platform to help the USO deliver the shows virtually. "Verizon Media is proud to support the USO with a world-class streaming delivery platform," said the company's CEO, Guru Gowrappan. "During this global pandemic, a few hours of entertainment can make a difference to our brave service members who are putting themselves in harm's way."

More information about the <u>USO's efforts is available online</u>.

<u>10x Management</u>, a freelance developer hiring agency, has partnered with <u>WhyHunger</u> and software engineers Greg Sadetsky and Colin Wren to develop a comprehensive, crowd-sourced open-source <u>interactive map of free meal sites in the U.S.</u>

"Food insecurity has become one of the most immediate challenges of the COVID-19 economic fallout," said WhyHunger Executive Director Noreen Springstead.

"With unprecedented unemployment sweeping the nation, hunger is on the rise and we are heading for a real crisis...."

Said Sadetsky: "...We saw a vital opportunity to use our mapping and software background, to create this resource to help aid individuals in their greatest hours of need. We're proud to partner with WhyHunger to provide real-time information, increase access and combat food insecurity during this pandemic."

WhyHunger

"This initiative not only leverages technology to solve a very critical problem, but it enables governments and community volunteers to give back in a safe and crucial way," said Michael Solomon, 10x Management's co-founder and co-creator of the map.

Cisco looks to connect healthcare operations and networking gear

Cisco on Monday said it has created two new programs to help healthcare organizations quickly get networking equipment for free: a "Pandemic Equipment Brokerage" and a "Healthcare Rapid Response Network Bundle."

The brokerage is designed to match companies looking to donate unused wireless equipment with healthcare facilities that may need it. "If you have equipment you'd like to donate to healthcare institutions, you can fill out a <u>Donor form</u> to tell us what you can contribute," the <u>company said in a statement</u>. "Healthcare organizations that need equipment can fill out the <u>Request form</u> to indicate what they need. Cisco will connect the organizations. We also offer email and virtual technical support for the healthcare organizations that need it. Please contact <u>covid-healthcare-wlan@external.cisco.com</u> for more information or for help."

Cisco said it has also found equipment in its supply chain that it can distribute quickly "to support pop-up clinics and rapid response healthcare systems across the globe. We are making simple kits – a router with LTE uplink, a switch with Power-over-Ethernet capability, and up to 5 wireless access points – available for quick shipment at no cost to qualifying healthcare institutions."

The company will provide support for the equipment, if needed.

Tableau tackles pandemic with data hub

Tableau Software has created a <u>COVID-19 Data Hub</u> to serve as a resource for vetting a variety of high-quality data sources related to the ongoing virus outbreak. The hub, which ties together data from the likes of Johns Hopkins University, the Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO), offers pre-made dashboards and allows users to build their own visualizations.

following the continued spread of the disease, first in Wuhan in China and then as it started to become clearer that it was moving globally. Then eventually it popped up right in our own backyard in Seattle."

Schwartz said the data hub is being used in a variety of ways: "I just heard from a couple of the laboratory pharmaceutical companies that they were using a lot of this data to help inform where to distribute testing kits," Schwartz says. "They're using this core data to figure out where to distribute nationally and globally."

Facebook, CMU tout symptom survey data collection

Carnegie Mellon University, which is working with Facebook to collect and evaluate data about Facebook users' COVID-19-related symptoms, has <u>released its initial</u> <u>findings</u>. And in tandem with that release, Facebook founder and CEO <u>Mark</u> <u>Zuckerberg wrote about the effort</u> – and what the company hopes to do – in the *Washington Post*.

"Getting accurate county-by-county data from across the United States is challenging, and obtaining such focused data from across the whole world is even harder," he wrote. "But with a community of billions of people globally, Facebook can uniquely help researchers and health authorities get the information they need to respond to the outbreak and start planning for the recovery."

The school said it hopes to be able to use the data collected by Facebook – and a separate effort involving Google – to accurately forecast coronavirus activity several weeks ahead of time.

Ryan Tibshirani, co-leader of the school's <u>Delphi COVID-19 Response Team</u>, said the effort has netted millions of responses and that the data tracks well with other sources of information about the pandemic. "I'm very happy with both the Facebook and Google survey results," said Tibshirani, associate professor of statistics and machine learning. "They both have exceeded my expectations."

positive coronavirus tests alone. "Most of the data sources are available on a county level and the researchers say they have good coverage of the 601 U.S. counties with at least 100,000 people," the school said in a statement.

"Within a few weeks, [CMU researchers] expect to use these estimates to provide forecasts that will help hospitals, first responders and other health officials anticipate the number of COVID-19 hospitalizations and ICU admits likely to occur in their locales several weeks in advance."

Said Zuckerberg: "We're partnering with faculty from the University of Maryland to expand this survey globally, and the team at Carnegie Mellon is building an application programming interface, or API, that will let researchers everywhere access the results. We're hopeful that this will help governments and public health officials around the world who might not otherwise have this kind of precise data to make decisions in the weeks and months ahead."

Instagram founders launch Rt.live virus tracker

Entrepreneuers Kevin Systrom and Mike Krieger, who founded Instagram in 2010 and later sold the company to Facebook, have launched <u>Rt.live</u>. The website uses continuously updated data from the <u>COVID Tracking Project</u> to determine how quickly the COVID-19 virus is spreading state by state in the U.S.

The site focuses on the virus' "Rt" value, where anything above 1.0 indicates it is spreading in a given state, and numbers below 1.0 indicate the spread is slowing down.

"The metric being tracked here (Rt) represents the effective reproduction rate of the virus calculated for each locale," the site explains. "It lets us estimate how many secondary infections are likely to occur from a single infection in a specific area. Values over 1.0 mean we should expect more cases in that area, values under 1.0 mean we should expect fewer."

Rt.live

In an <u>April 12 blog post</u>, Systrom went into detail about tracking and how Rt values can change as a population modifies its behavior, by staying away from other people and keeping social distance, for instance.

"We've all witnessed that humans are adaptable," Systrom wrote. "Our behavior changes, whether mandated or self-prescribed, and that changes the *effective R* value at any point in time. As we socially distance and isolate, *R* plummets. Because the value changes so rapidly, Epidemiologists <u>have argued</u> that the only true way to combat COVID19 is to understand and manage by *Rt*.

"I agree, and I'd go further: we not only need to know *Rt*, we need to know local *Rt*," he wrote. "New York's epidemic is vastly different than California's and using a single number to describe them both is not useful. Knowing the local *Rt* allows us to manage the pandemic effectively."

<u>TechCrunch initially reported about the site launch</u> on April 18.

Bannersnack offers its Team collaboration option free for 90 days

Collaboration platform company Bannersnack is offering its Team-level plan for free for 90 days to nonprofit groups fighting COVID-19.

post. "We'll ensure you get setup help via our onboarding team and that you're equipped to be up and running with whatever you need. This includes training on how to build a complete marketing campaign in minutes, how to personalize graphics and posters, import PSD files, and how to get your workspaces organized so that everyone is collaborating efficiently.

"To clarify: this is open to everyone in nonprofit or [a non-governmental organization] that is focused on fighting COVID-19, and there's absolutely no obligation that you continue as our customer afterward. It's our most advanced plan, free for a duration of 90 days from the time you sign up for the trial."

To sign up, potential users should send an email to teams@bannersnack.com with a subject line that reads "NGO Fighting COVID-19."

Twilio's Video platform now free for COVID-19 responders

Twilio said it is now offering three months of free use of Twilio Video Boost for customers in healthcare, education, and in the nonprofit sector fighting the pandemic; users have to sign up before June 30 to take advantage of the offer.

"...Twilio is excited to launch the Twilio Video Boost program, offering three months free usage of our Video product for new customers (or existing customers with a new video need)...," the company <u>said in a statement</u>.

Anyone who meets the criteria and is interested in using Twilio should <u>reach out to</u> the <u>company directly</u>.

Gazelle donates iPads to healthcare workers

Online retailer Gazelle is <u>donating all of the iPads from its warehouse in Louisville</u>, <u>Ky. to hospitals</u> in the U.S. Gazelle, which is owned by <u>ecoATM</u>, has so far donated about 300 iPads since late March to frontline healthcare workers who are fighting the COVID-19 pandemic.

country to help patients communicate with loved ones, aid with telemedicine and provide better communication between patients and health workers."

The iPads have gone to a number of faciltiies, the company said, including Sharp Healthcare in San Diego, Calif.; UofL Health in Louisville; Kaiser Permanente in Ontario, Calif., and to hospitals such as Weill Cornell in New York City. In particualr, Gazelle said the devices could be used in a number of ways, including for communications between patients and loved ones while quarantined; for telemedicine with remote patients; as a communication tool with COVID-19 patients to reduce the use of PPEs (masks, gowns, face shields); and to allow for telemedicine consultations with ICU doctors.

Nuance offers Dragon Medical for free for 90 days

Nuance Communications, which offers offers conversational AI, speech recognition and transcription services, is making some of its services available for free to healthcare workers.

"To enable uninterrupted services during COVID-19, Nuance is offering a range of free templates, licenses and services to healthcare customers," the comany said in a statement. Among the services, Nuance will provide:

- Free Dragon Medical One 90-day add-on licenses to allow physicians and nurses to use their voice to capture patient info efficiently and securely.
- Free Dragon Medical for Epic Haiku and Canto 90-day add-on licenses so physicians can capture the patient data through Epic mobile apps.
- Free PowerMic Mobile 90-day add-on licenses to help physicians and nurses dictate, edit, and navigate electronic health records (EHRs) using a smartphone as a secure wireless microphone.

More information about what Nuance is providing is <u>available on the company's</u> website.

Apple, Google team up on COVID-19 contact tracing

the spread of the COVID-19 coronavirus. The two companies plan to release APIs and OS-level technology that will allow government agencies and healthcare groups to alert users when they may have been exposed to the virus.

"Since COVID-19 can be transmitted through close proximity to affected individuals, public health officials have identified contact tracing as a valuable tool to help contain its spread," the two companies said. "A number of leading public health authorities, universities, and NGOs around the world have been doing important work to develop opt-in contact tracing technology. To further this cause, Apple and Google will be launching a comprehensive solution that includes application programming interfaces (APIs) and operating system-level technology to assist...."

The technology will be rolled out in two phases: in May, the companies plan to release APIs to enable interoperability between Android and iOS devices using apps that will be available in the companies' respective app stores. After that, the Bluetooth-based technology will be built into operating systems – what Apple and Google called a more "robust" solution. They also stressed that protecting privacy will be an important consideration.

The companies <u>unveiled draft technical documentation</u> offering more specifics, but did not offer a more detailed timeline for when the tracking system would be in place.

"All of us at Apple and Google believe there has never been a more important moment to work together to solve one of the world's most pressing problems," the two companies said. "Through close cooperation and collaboration with developers, governments, and public health providers, we hope to harness the power of technology to help countries around the world slow the spread of COVID-19 and accelerate the return of everyday life."

DeepCode's dev platform now free for three months

the next three months."

The <u>company's technology</u> relies on machine learning to process code in opensource software projects and look for serious coding issues and identify bugs.

"Developers spend 30% of their time finding and fixing bugs, which is valuable time that they really can't afford to lose right now," said Boris Paskalev, CEO and cofounder of DeepCode. "We've seen an increased rate of usage as more developers have started trying new ways to check their code for bugs. We're temporarily expanding our free offerings to help as many developers as possible continue to produce great software."

MIT: Bluetooth 'chips' from phones could help trace virus

MIT researchers and experts from other institutions are <u>developing a system called PACT</u> that could help public health officials track and trace COVID-19 while preserving privacy, the school <u>said in a statement</u>. The system – PACT stands for "Private Automatic Contact Tracing" – relies on short-range Bluetooth signals emitted by smartphones; the signals represent random strings of numbers that nearby smartphones can receive and "remember."

"If a person tests positive, they can upload the list of chirps their phone has put out in the past 14 days to a database," said Kylie Foy, of MIT's Lincoln Laboratory. "Other people can then scan the database to see if any of those chirps match the ones picked up by their phones. If there's a match, a notification will inform that person that they may have been exposed to the virus, and will include information from public health authorities on next steps to take."

The random chirps are designed to protect users' privacy.

"I keep track of what I've broadcasted, and you keep track of what you've heard, and this will allow us to tell if someone was in close proximity to an infected person," said Ron Rivest, MIT Institute Professor and principal investigator of the project. "But for these broadcasts, we're using cryptographic techniques to

individual."

MIT said the prototype system works for both iOS and Android devices, and researchers are now working with hardware makers to try and roll it out. No release date has yet been announced.

MariaDB offers SkySQL free for virus data analysis

MariaDB Corp.s is offering free access to MariaDB SkySQL to groups who are fighting COVID-19 and need enterprise-grade analytical capabilities for their work.

"If you or your organization in the healthcare, medical, academic or other nonprofit space have an application that requires analytical capabilities to analyze large amounts of data, we would like to offer you the opportunity to use MariaDB SkySQL for free," the company said. Projects chosen as a good match "will be able to securely store, analyze and visualize massive amounts of data at no cost on MariaDB SkySQL."

Applications can be made online and "must directly support research, innovation and analysis targeted at fighting COVID-19 or its effects," MariaDB said. "The application needs to be able to store and access data on SkySQL. Note, SkySQL is HIPAA compliant. MariaDB, along with a panel of experts, will determine within [five] business days whether your application qualifies or if more information is needed to make a determination."

BIMobject opens up platform to host product files

Building Information Modeling firm BIMobject is making its platform freely available for uploads of files used to create medical equipment, a move it says could help fight the COVID-19 pandemic.

"The coronavirus outbreak has put enormous pressure on medical professionals and frontline workers globally," Carl Silbersky, CEO of BIMobject, <u>said in a statement</u>. "Medical supplies and equipment, such as face shields and ventilators,

arrangements and contracts, designing these temporary hospitals requires dexterity

and agility.

"...Like many organizations globally, we at BIMobject want to help as best we can," Silbersky said. "To do so, we've opened up our platform to host any information on products that can help combat the outbreak. At our <u>COVID-19 page</u> we are collecting everything from 3D printing files for medical equipment – including masks and ventilator parts – to designs for emergency hospitals, shelters and supporting structures.

"With details of relevant medical equipment and designs now freely available on our platform, we hope our global community will help spread the knowledge of these products. These products can help save lives and, by connecting the people that need them to the people that have them, we hope to do our bit to help."

Files <u>can be uploaded here</u>, the company said.

Synology offers VPN Plus licenses for free

Taiwan-based Synology said Monday <u>it will offer VPN Plus licenses for its Synology</u> <u>routers for free</u> until Sept. 30.

"We have seen many businesses rushing to adopt VPN solutions in order to set up an infrastructure to enable a remote workforce," said Hewitt Lee, Director of Synology Product Management Group. "Over the past two months, we have seen a five-fold increase in VPN Plus license purchases. As the situation continues to develop in unprecedented ways, we understand that many are uncertain of how to maintain business continuity. Synology is offering VPN Plus licenses for free in an effort to help businesses resume operations remotely."

Current and new owners of Synology's RT1900ac, RT2600ac, and MR2200ac wireless routers can purchase VPN Plus Client VPN Access and Site-to-Site VPN licenses for free," the company said. The licenses are perpetual and do not expire or require additional costs after Sept. 30..

Apple CEO <u>Tim Cook took to Twitter on Monday</u> to announce it has sourced 20 million masks for medical workers through the company's supply chain. In a two-minute video, Cook also said Apple is now working to "design, produce and ship" face shields for those on the front lines fighting the pandemic.

"Our first shipment was delivered to Kaiser Hospital facilities in the Santa Clara valley this past week," he said, showing one of the shields. The company plans to ship 1 million of the shields by the end of this week, and 1 million per week after that. Apple hopes to eventually make shipments outside the U.S. as well.

HPE Aruba provides network help to floating hospital in Italy

Aruba, a Hewlett Packard Enterprise company, has installed network infrastructure on the *GNV Splendid*, a passenger ferry that has been turned into a floating hospital to help fight the COVID-19 pandemic.

Moored in Genoa, Italy, the ship now provides added hospital space and medical treatment for COVID-19 patients. The network includes 70 access points and more 4 kilometers of cable, providing Wi-Fi coverage for healthcare workers and patients on board.

In addition to support for data transfers to and from Genoa hospital, the network is designed to improve the day-to-day experience for patients, giving them full internet connectivity. It also allows ambulance crews to provide real-time updates on the status of patients as they arrive.

The ship has been converted to support 25 patients, with cabins converted into isolation chambers, and is equipped with oxygenators to treat coronavirus patients who need low-intensity care and for recovery. If needed, the ship can increase its capacity to house about 400 patients.

Aruba is also donating \$50 million in secure network connectivity kits for the provisioning of pop-up clinics, testing sites and temporary hospital facilities in the US, Canada and several countries in Europe and the Asia-Pacific region.

Berlin-based Cortado, which provides enterprise mobility and file sharing solutions for businesses, is offering free virtual data rooms for home offices and/or team collaboration efforts. The company's Teamplace software is for those "who prefer to work in their home office [and] need a virtual room in which they can work and share documents with others in the simplest possible way.

"With Teamplace, such virtual workspaces can be created very easily, without VPNs and shared with colleagues, partners or customers," the company said in a statement. "Cortado's cloud storage solution, which is dedicated to teamwork, offers Office 365 integration for editing documents, a comment function, file versioning, and an activity overview. The data is encrypted during transmission and securely stored on servers located in Germany."

Users interested in the data rooms start with 5GB of space, but the company said it would provide 50GB if needed. Users must send an e-mail to hello@teamplace.net and explain the data room's purpose to qualify.

Postman develops COVID-19 testing site with crowdsourced info

<u>Postman</u>, a San Francisco-based platform for API development, has crafted a website that relies on crowdsourced information to locate coronavirus testing sites in the U.S.

"This effort to crowdsource and centralize the availability of COVID-19 testing locations across all 50 U.S. states uses two freely available online tools, while using APIs to make sure the location data can be syndicated and distributed as widely as possible," Postman said in a statement. "This resource can also maintain the accuracy and freshness of the API's source data by centrally managing it via Google Sheets. Contributors can email the Postman team when they find new or updated testing sites, and API developers can contribute their expertise via the GitHub page."

government experts who need quick access to real-time critical data.

Spell looks to boost ML efforts in COVID-19 fight

New York-based Spell, which provides a platform for machine-learning and data analytics, is providing a number of resources – and free GPU compute access – to people and institutions fighting the coronavirus outbreak.

"Are you a machine learning engineer or data scientist eager to contribute your technical expertise to help fight the COVID-19 pandemic? We're here to help," the company said on its website. "In record time, the machine learning community has rallied together, organizing a large number of projects and crowdsourced efforts that enable practitioners to effectively contribute time and energy to this cause."

The resources Spell highlighted include:

- CORD-19, a body of work that contains full texts and paper abstracts from 44,000 journal articles covering COVID-19, SARS-CoV-2, and the coronavirus family of viruses. It's available for download or <u>as a Kaggle dataset</u>.
- LitCovid, <u>a literature hub</u> that provides a reference list of 1,500 COVID-19 and SARS-CoV-2 -specific papers curated by subject matter experts. Many of these articles are open access, and users can download paper metadata as a CSV file.
- The 2019-nCoV dashboard, which was created by Johns Hopkins, tracks the regional and international spread of COVID-19. The dashboard is regularly updated and continues to be among the most accurate trackers on the web, according to Spell.
- Collaboration spaces for data scientists. These include <u>Data Against COVID</u>, a Discourse channel for data scientists looking to collaborate on COVID-19 -related data science projects; and <u>Help With COVID</u>, a Y Combinator created volunteer-to-project matching website for COVID-19 -related software projects.

Amplify.ai, Messenger team up on Al messaging

Amplify.ai, which develops Al-driven, conversational virtual assistants, is offering up its virtual assistant for free to government health organizations fighting the pandemic. The company partnered with Facebook to allow the organizations to share information with concerned citizens during the COVID-19 outbreak. The company also deployed a COVID-19 virtual assistant for the Indian Government

"Given the rapid rate of change around the pandemic, Amplify.ai's Messenger experience can automate responses to commonly asked questions and push information to a large population in a timely manner," the company said in a statement. "The main focus of Amplify.ai's solution...is that it is interactively delivering the latest news, expert information and official updates, while providing one-on-one engagements and solutions within 24 hours. The platform uses personalization, custom variables, and conversational data gathering analytics to provide citizens with COVID-19 information regarding test sites, symptoms, results turn-around time, and more."

"In pressing times like these, our team is equipped and dedicated to working in tandem with the team at Facebook ... to help government health organizations and UN agencies combat COVID-19," said Amplify.ai CEO and co-founder Mahi de Silva. "Our Al-powered, interactive platform delivers valuable insights not only to local organizations about community specific questions and issues but helps inform millions of citizens around the world with a fast turnaround."

CenturyLink donates high-speed internet to temp hospitals

As the number of temporary hospitals grows in the U.S. to help patients affected by the COVID-19 outbreak, CenturyLink said it's <u>donating mich-needed fast internet</u> <u>connections to the facilities</u>.

"Grappling with the sudden need for more hospital beds and overflow capacity, local municipalities are transforming various facilities into temporary field hospitals," the company said in a statement. The list of facilities the company is provisioning now includes:

- The <u>U.S. Naval Ship Mercy</u>, now operating at the port of Los Angeles. CenturyLink set up high-speed connectivity for the Mercy and a 1-gigabit Ethernet circuit connecting the Defense Information Systems Agency's shored-based Naval Air Station North Island to the ship.
- The CenturyLink Field Event Center in Seattle, which got a 200 Mbps fiber connection.

Seattle, which got high-speed fiber internet connections at eight quarantine locations.

"This is the beginning of our essential work to assist healthcare workers on the front lines, as we respond where we are needed the most," said Ed Morche, CenturyLink's president of government and enterprise markets. "As these needs arise across the country, CenturyLink is coordinating with local government, hospitals, and the military to locate field hospitals on our network so we can provide immediate connectivity."

Domo updates COVID-19 Global Tracker

Looking to bolster the data about the pandemic it's already providing, analytics firm Domo has updated its free, interactive <u>Coronavirus (COVID-19) Global Tracker</u> with county-level infection statistics, stay-at-home orders and testing-by-state data.

"We've seen incredible interest in this free resource as organizations of all kinds seek to quickly understand how the virus is impacting the world in which they operate," said Domo CEO and founder Josh James. "Easy access to consumable data can help inform critical decisions and actions that help navigate through this crisis. We're seeing hundreds of customers — healthcare organizations, grocers, national retailers, logistics firms and many others — combine the underlying data sets with their own operational data to help them respond more quickly to the changing environment."

Updated every 10 minutes, the tracker aggregates and cross-checks data from sources including the Centers for Disease Control (CDC), the World Health Organization (WHO), Johns Hopkins University, Worldometer and Enigma.

WPI turns to 3D printing to create ventilators

Researchers at Worcester Polytechnic Institute (WPI) in Worcester, Mass. are developing designs that <u>could be used with 3D printers to create ventilators</u> from readily available manual, handheld, bag valve mask (BVM) resuscitators.

electronics and mechanical engineering could use them to produce ventilators for their local hospitals," according to WPI's Sharon Gaudin. "A manufacturing company also could use the designs to produce ventilators quickly and at scale."

"We're taking things that are used every day in emergency medicine and finding a way to turn them into safe, reliable, and readily replicable ventilators that can save patients' lives. And we're sharing those designs with the world," said <u>Gregory</u> <u>Fischer</u>, professor of robotics engineering and mechanical engineering and director of the <u>PracticePoint Medical Cyber-Physcial Systems R&D Center</u>.

The ventilators built from the WPI designs are meant to be used for more stable patients so commercial ventilators with more advanced sensing and control can be saved for critical patients hit hard by the COVID-19 outbreak.

Google Cloud offers COVID-19 Public Datasets

Google on Tuesday <u>unveiled a COVID-19 Public Datasets program</u> designed "to make data more accessible to researchers, data scientists and analysts," the company said. "The program will host a repository of public datasets that relate to the COVID-19 crisis and make them free to access and analyze. These include the Johns Hopkins Center for Systems Science and Engineering (JHU CSSE) dataset, Global Health Data from the World Bank, and OpenStreetMap data.

"As with all data in the <u>Google Cloud Public Datasets Program</u>, Google pays for storage of datasets in the program. BigQuery also provides free queries over certain COVID-related datasets to support the response to COVID-19. Queries on COVID datasets will not count against the <u>BigQuery sandbox free tier</u>, where you can query up to 1TB free each month."

In terms of limits and duration, the company pledged that the datasets will remain free until Sept. 15, and said queries of COVID data are free. But if "you join COVID datasets with non-COVID datasets, the bytes processed in the non-COVID

The datasets will be updated daily.

DigitalOcean offers developer cloud assets

For nonprofit groups working against the COVID-19 pandemic, <u>DigitalOcean is</u> offering \$100,000 in infrastructure credits for new projects and up to \$50,000 in cash donations to the company's <u>COVID-19 Relief Fund</u>. (The company gives \$100 for each proposed project that meets DigitalOcean requirements.)

The kinds of efforts it's backing include:

- Applications or online resources designed to <u>educate</u>, coordinate help, or <u>track the virus</u>;
- Hackathons or virtual challenges related to the pandemic;
- Tools that teach others and enable and support online education;
- And projects that help SMBs affected by the coronavirus.

"Our community is full of innovators and technologists who are leveraging their skills to create tools, resources, and events with missions focused on the COVID-19 pandemic," the company said on its website. "As always, we're inspired by our community ... and we're committed to helping bring your impactful ideas to life."

Kaleyra: Free text messaging for the Italian Red Cross

Cloud-based communications firm <u>Kaleyra is supporting the Italian Red Cross</u> (Croce Rossa Italiana, CRI) with a free text-message service for volunteers and citizens dealing with the spread of COVID-19. By texting 4353535, the CRI can recruit health workers in affected areas, manage questions from citizens, and communicate quickly with volunteers, Kaleyra said. The toll-free number can be reached by all local operators to help direct essential medical services through text messages.

"The Coronavirus pandemic has forced all of us to change our habits — the way we travel, the way we live, and the way we work," the <u>company said in a March 26 blog post</u>. "Work from home has become the new norm. Like many other businesses,

does not moon the end of teamwork or business. "

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The service for the CRI has seen more than 7,500 text messages since it went into operation in mid-March.

Ping: Free single sign-on, MFA for remote workers

Ping Identity, which provides cloud-based sign-on (SSO) and multi-factor authentication (MFA) security options, is offering six month of its services for free to new customers for unlimited apps and identities, or six months of free MFA for existing customers. The move comes in response to the rush by companies to have their employees work from home as the COVID-19 outbreak worsens worldwide.

"People around the world are being encouraged or required to work from home to stay healthy and do their part to slow the spread of COVID-19," the company said on its website. "We want to do our part to help.... That's why we're providing enterprises with fast, free SSO and MFA for unlimited applications."

According to Ping, customers who use its service get:

- One-click access to all of their SaaS applications;
- Strong authentication for VPN connections;
- And increased productivity and security for at-home workers.

Ping provides identity security services to a wide variety of companies across numerous industries, including HP, Netflix, Chevron, Intuit and BlueCross BlueShield of Tennessee, among others.

Neo4j offers help with graph analytics

Neo4j is offering free access to commercial versions of its Graph Data Platform and other assistance to developers, researchers and data scientists working on COVID-19-related projects. "The goal is to help data scientists and researchers analyze the massive amounts of connected data about people, infections, locations, drugs, and more," the company said in a statement.

The company is also hosting a <u>virtual Graphs4Good Hackathon</u> through April 14 for those looking to "contribute their energy towards a meaningful graph project." On April 15, Neo4j plans to invite project leads and contributors to present in a Graphs4Good Project Showcase. (The hackathon, announced March 26, already has more than 150 sign-ups.)

Neo4j highlighted the <u>COVID graph</u> — a knowledge graph by researchers, developers and volunteers that integrates various COVID-19 public datasets to help researchers and scientists more efficiently find their way through relevant publications, case statistics, genes and functions, molecular data and more.

Al to help overloaded hospital switchboards

A Palo Alto, Calif. Al company, Aisera, is offering its software free for 60 days to help healthcare organizations and government agencies manage a crush of queries and phone calls from people worled about the COVID-19 outbreak.

Specifically, the company said its remote working virtual assistant and collaboration app can bolster "customer service during a time of need during the global pandemic. The Aisera Virtual Assistant will help hospitals and government agencies deliver COVID-19-related responses to the high volume of questions, concerns, and inquiries caused by this pandemic," the <u>company said in a statement</u>.

"The overwhelming amount of inquiries [is] beyond what staff and current tools can handle," said Aisera CEO Muddu Sudhakar. "We know this tool can help save lives and slow the spread of this disease by providing timely response to urgent public inquiries."

"Hospitals are setting up chatbots, symptom checkers, and telemedicine tools virtually overnight to triage patients, so that healthy people can stay home," the company said. "Aisera's self-learning [service] employs the key components of AI — NLU and Natural Language Processing (NLP) — to enable unsupervised learning and a stateful flow of dialogue...."

An infrastructure boost for firms fighting COVID-19

London-based infrastructure provider <u>Heficed</u> said Monday it will offer its services for free to companies working on the front lines to end the COVID-19 pandemic.

"Heficed can provide organizations in need with servers for data storage and processing, secure cloud hosting to protect mission-critical data and a fast and reliable internet connection that would help maintain operational stability," the company said in a statement.

Founded in 2008, Heficed aims to help companies and government organizations order, lease, deploy, and manage IP addresses. Its platform automates what can be a time-consuming process, lowering the costs associated with provisioning IPs to physical and virtual infrastructure.

The company said organizations should contact it via hello@heficed.com and provide information "about the project they are currently working on and details on the required resources. Heficed believes that joining forces with the organizations standing in the front lines of this crisis will accelerate the development of solutions that will help combat the pandemic."

Apple launches COVID-19 app, website

Apple on Friday <u>unveiled a screening tool and set of resources</u> designed to help people stay updated on the ongoing pandemic and take steps to protect their health. The information provided is based on the latest Centers for Disease Control guidance.

The new <u>COVID-19 website</u> and the <u>COVID-19 app</u> (now available in the company's App Store), were created jointly with the CDC, the White House Coronavirus Task Force and the Federal Emergency management Agency.

CDC recommendations on next steps, including guidance on social distancing and self-isolating, how to monitor symptoms, whether or not a test is recommended, and when to contact a medical provider. This screening tools are not designed to replace instructions from healthcare providers or guidance from state and local health authorities, the company said.

Start-up Apollo tweaks platform to match healthcare pros with hospitals

A health-tech startup that matches healthcare professionals with healthcare organizations and facilities seeking immediate shift coverage has relaunched its
platform in light of an expected nationwide shortage of nurses, physicians, healthcare workers, and volunteers due to the COVID-19 pandemic. The online tool from Apollo is intended to reduce the strain on the U.S. healthcare system; Apollo has waived any fees for using its platform for the next four weeks.

Using the platform, hospitals can post jobs and job-seeking professionals can create profiles. An algorithm then matches those institutions needing immediate assistance with potential employees to address staffing challenges. Apollo has more than 90 physicians enrolled from several major health systems.

"As medical professionals, we understand the desperate need of the healthcare community right now," said Apollo Founder and CEO Jon Lensing. "We believe that this shift in our original plans better serves our hurting nation. Our mission has always been to help save lives, and it will forever remain that."

"COVID-19 has rapidly changed life in the United States in ways that few thought possible just weeks ago," the company said in a statement. "While we adapt to these changes, there may be even more changes to come including increased strain and demand on our healthcare facilities and healthcare providers. At Apollo, we want to help mitigate the stress endured by both healthcare facilities and healthcare providers."

A number of major tech players, government agencies and universities has joined forces to create a COVID-19 High Performance Computing Consortium that hopes to speed up the fight against the spread of the COVID-19 virus.

The group includes IBM, AWS, Google, HPE, Microsoft, NASA, the U.S. National Labs, NASA, the Massachusetts Institute of Technology, the White House Office of Science and Technology Policy and the U.S. Department of Energy, among others.

The idea is to meld the high-performance computing (HPC) systems supported by consortium members to help researchers run massive amounts of epidemiology, bioinformatics, and molecular modeling calculations. The experiments would take years to complete if done by hand, or months if handled on slower, traditional computing platforms, according to IBM.

New York's technology SWAT teams

New York officials are <u>pulling together "Technology SWAT teams"</u> as the state <u>struggles to deal with COVID-19 outbreak</u>.

"New York State is launching technology driven products with leading global tech companies to accelerate and amplify our response to COVID-19," the state said on its official website. "We are looking for impactful solutions and skilled tech employees to help. Individuals from leading global technology companies are being deployed across high-impact and urgent coronavirus response activities."

In particular, New York is seeking "experience in product management, software development/engineering, hardware deployment and end-user support, data science, operations management, design, or other similar areas. Technology companies, universities, nonprofits, research labs, and other organizations with technology expertise are invited to submit an expression of interest."

IT pros interested in helping must complete an "Interest Form." The state envisions 90-day deployments and is focusing on workers already working remotely,

"Given that many employers are having many workers work from home, volunteers would collaborate virtually with New York State teams," the state said. "So, preference will be given to those in the Eastern and Central US time zones, but we are open to the west coast as well."

New York — especially New York City — has been hard hit by the coronavirus pandemic, and leads the nation in diagnosed cases.

The Devpost hackathon

Hoping to generate "software solutions that drive social impact," Devpost has organized a COVID-19 Global Hackathon to try to fight the ongoing coronavirus pandemic.

"We're encouraging YOU — innovators around the world — to #BuildforCOVID19 using technologies of your choice across a range of suggested themes and challenge areas — some of which have been sourced through health partners including the World Health Organization and scientists at the Chan Zuckerberg Biohub," Devpost said.

"The hackathon welcomes locally and globally focused solutions, and is open to all developers — with support from technology companies and platforms including AWS, Facebook, Giphy, Microsoft, Pinterest, Slack, TikTok, Twitter and WeChat, who will be sharing resources to support participants throughout the submission period."

Devpost said it's working with a number of partners including the WHO to find "key challenge areas" that tech innovation could help solve. Those areas include: accurate disease-prevention information "in languages/formats that resonate locally, as well as regional needs for expertise, resources/supplies and financial support from donors."

The organization is focused on seven major areas, but suggested that developers use the technologies of their choice in any way they think they can make an impact.

- Health: Address and scale a range of health initiatives, including preventative/hygiene behaviors (especially for at-risk countries and populations), supporting frontline health workers, scaling telemedicine, contact tracing/containment strategies, treatment and diagnosis development.
- Vulnerable populations: Problems faced by the groups of people who are
 disproportionately affected by the various health, economic, and social issues related to
 the COVID outbreak around the world, such as those with underlying health conditions or
 a thin social safety net.
- **Businesses**: The set of problems that businesses are facing to stay afloat, collaborate effectively, and move parts of their business online.
- **Community**: Promoting connection to friends, family, and neighbors to combat social isolation and the digitizing of public services for local governments.
- **Education**: Alternative learning environments and tools for students, teachers, and entire school systems.
- **Entertainment**: Alternatives to traditional forms of entertainment that can keep the talent and audiences safe and healthy.
- Other: The above themes are just suggestions. Feel empowered to get creative!

The organization is working with a variety of companies, including Oculus, Uber, Evernote, Twitter, Twilio, Venmo, IBM, Microsoft and Qualcomm. Highlighted projects will be announced April 10.

N.Y. Times releases coronavirus dataset

The New York Times made public its comprehensive datasets on coronavirus cases in the U.S. after requests from researchers, scientists, government officials and businesses looking to better understand the virus and model how the pandemic might evolve. The datasets are available on GitHub.

The *Times* has been tracking cases since late January "after it became clear that no federal government agency was providing the public with an accurate, up-to-date record of cases, tracked to the county level, of people in the U.S. who had tested positive for the virus," the <u>company said in a statement</u>.

"We hope the dataset can help inform the ongoing public health response to the pandemic and ultimately, save lives," said *New York Times* Executive Editor Dean Baquet. "We believe the data may help reveal how Covid-19 has spread through

outbreaks in the future."

The CTI cybersecurity effort

A growing number cybersecurity professionals calling itself the "CTI League" has banded together to help hospitals fend off hackers and other bad cyberactors. The group now has about 500 members worldwide and was launched earlier this month by Ohad Zaidenberg, lead cyber threat intelligence researcher at Israeli firm ClearSky Security; Nate Warfield and Chris Mills, security researchers at Microsoft; and Marc Rogers, executive director of security at Okta and an organizer of the DefCon hacking conference.

"If some hospital gets attacked by some ransomware and wouldn't be able to pay, people will die because they wouldn't be able to get the medical services needed," Zaidenberg told NBC.

The CTI League, which collaborates on its efforts using Slack, looks for vulnerabilities hackers are targeting, then searches for hospitals or other medical facilities that may be vulnerable. "The first thing we want to do is neutralize attacks before they happen. The second is to help any medical organization after they are attacked," Zaidenberg said.

Rogers told DARKreading.com that the CTI League has members in 40 countries. "It's important to us that this is a global effort, because this is a global threat. That's why we made the call worldwide, and were delighted when the world responded."

Kaggle touts machine-learning challenge

Kaggle, an online community for data scientists and a platform for competitions, has <u>unveiled a new bounty-paying challenge</u>: the COVID-19 Open Research Dataset Challenge, or <u>CORD-19</u>.

CORD-19 asks AI and machine learning researchers to develop text and datamining tools to analyze a dataset that includes tens of thousands of articles on

The <u>prize for each of the tasks</u> in the challenge is \$1,000, delivered as cash or as a charitable donation to research and relief efforts.

Intel allocates \$6M for coronavirus relief

The Intel Foundation plans to provide \$4 million to back coronavirus relief efforts in areas where the company has a significant presence and is offering up to \$2 million in matching funds for every regular full-time and part-time employee and U.S. retiree who wants to contribute to the COVID-19 fight. Intel will match contributions made until April 10.

The \$4 million donation is aimed at community foundations and organizations focused on food security, shelter, medical equipment and small-business support. The matching donations will go to food banks, school districts and children's hospitals helping local communities manage the pandemic's impact.

In the U.S., donations are targeted at several states, including Arizona, California, Massachusetts, New Mexico, Oregon and Texas. Internationally, donation areas include Costa Rica, India, Ireland, Israel, Malaysia, Mexico and Vietnam.

Facebook offers up Messenger

Social networking giant Facebook on March 23 <u>unveiled two initiatives to help</u> <u>governments fight the pandemic</u> using its Messenger chat service.

"We're partnering with our developer community to provide free services to government health organizations and UN health agencies to help them use Messenger to scale their response to the COVID-19 crisis," Facebook said. It highlighted efforts by <u>Argentina's Ministry of Health</u> to provide updated, accurate information about the coronavirus.

<u>UNICEF</u> and <u>Pakistan</u> are also using Messenger to share information and advice about coronavirus.

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Also see: Coronavirus prompts collaboration tool makers to offer wares for free and Free security resources for work-from-home employees during the COVID-19 crisis

With reports from Michelle Davidson, Thor Olavsrud, Galen Grumman, Tim Green, Sharon Machlis, Serdar Yegulalp, Scott Carey, Eric Knorr and Amy Bennett.

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