SEP 01, 2018

# echelife NEWS

#### **NEXT iphones** Apple's Sideways Strategy

**EDUCATION INITIATIVE** BILL GATES FUNDING POOR US SCHOOLS

# NEW NEODELS CAR MAKERS MOVING INTO TESLA'S TURF



### This is a plane.



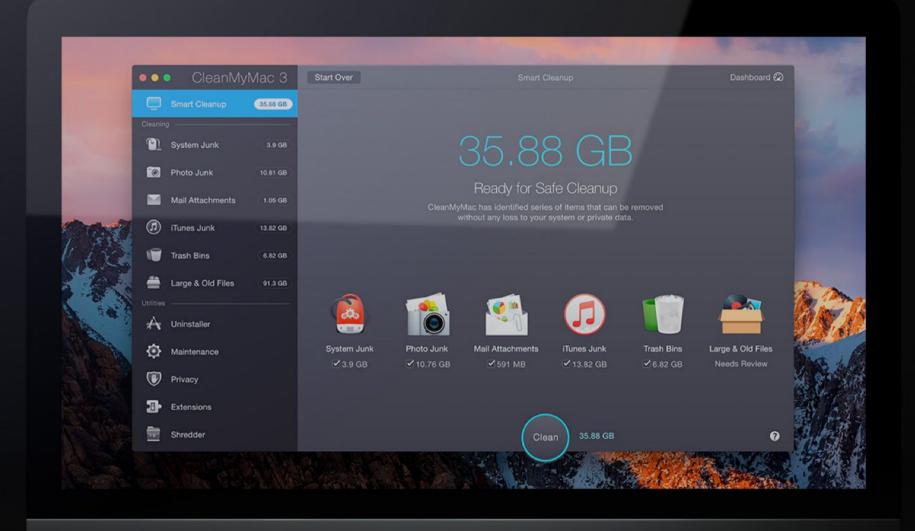
### This is a plane.

When choosing MINDFIELD DIGITAL<sup>™</sup> and our DBMD <sup>™</sup> Program for your development services, you can be sure you will receive an app that will save you money and resources using the most advanced design and interface concepts.

We follow an Application Development Cycle where every step is carried out to maximum perfection. Our application developers are experienced and knowledgeable, and are skilled at delivering top high tech Apps.

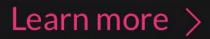
Our team is constantly looking for promising partners in order to improve our quality, broaden our experience and create a global range of Apps with the most impressive conceptual designs, 3D Graphics and Sound FX.





## CleanMyMac 3

All the tools to speed up your Mac, in one app.





RUMORS ABOUT APPLE'S NEXT IPHONES GATHER PACE 06 SUPERCYCLE: IPHONE EVENT COULD INCLUDE BIG SURPRISES 24 SAMSUNG'S \$1,000 NOTE 9 IS GREAT - BUT SO IS THE CHEAPER S9 40 ELECTRIC CAR MAKERS MOVING INTO TESLA'S TURF WITH NEW MODELS 46 UBER HEADS IN NEW DIRECTION WITH TOYOTA ON SELF-DRIVING CARS 58 Q&A: AT&T ENTERTAINMENT EXEC ON FUTURE OF VIDEO 64 BILL GATES DIRECTS EDUCATION FUNDING TO POOR US SCHOOLS 70 GOOGLE DENIES TRUMP CHARGE IT RIGS TRUMP NEWS SEARCHES 82 GOOGLE'S SEARCH TOOL TO HELP JOB-SEEKING VETERANS 94 GOOGLE MAPS MISTAKENLY SHOWS 'MCCAIN SENATE OFFICE BUILDING' 96 ITUNES REVIEW 102 BOX OFFICE TOP 20: 'CRAZY RICH ASIANS' SCORES AGAIN 118

COMPUTER-SCREEN THRILLER 'SEARCHING' TRANSCENDS ITS GIMMICK 128 JOHN KRASINSKI TACKLES TERROR, CAREER SHIFT IN 'JACK RYAN' 136 ROTTEN TOMATOES TAKES STEPS TO DIVERSIFY CRITICS POOL 144 DECADES-OLD SKATEBOARDING TRICK MIXES WITH VIRTUAL REALITY 150 PLANS ON MAKING UNTRACEABLE 3D GUNS CAN'T BE POSTED ONLINE 156 UNIVERSITY OF NEW MEXICO ADDS \$3B IN ECONOMIC OUTPUT 164 WEST VIRGINIA STATE UNIVERSITY HONORS NASA MATHEMATICIAN 166 PLUTO EXPLORER SPOTS NEXT DESTINATION BILLION MILES BEYOND 168 MEMORY CHIP MAKER MICRON ANNOUNCES \$3B EXPANSION IN MANASSAS 170 HACKER OF CELEBRITY PHOTOS GETS 8 MONTHS IN PRISON 176 **USEFUL OR CREEPY? MACHINES SUGGEST GMAIL REPLIES 178** MICROSOFT TO CONTRACTORS: GIVE NEW PARENTS PAID LEAVE 184 FOXCONN GIVING \$100 MILLION TO UW-MADISON FOR PARTNERSHIP 192 CALIFORNIA SEEKS TO BE FIRST STATE TO LIMIT PLASTIC STRAWS 198 EXPERTS ASSEMBLE FOR UN-HOSTED MEETING ON 'KILLER ROBOTS' 202 FARM IN SOUTH KOREAN ROAD TUNNEL NO ROSE-COLORED PIPE DREAM 208 RIGHTS GROUPS TO GOOGLE: NO CENSORED SEARCH IN CHINA 214



### RUMORS ABOUT APPLE'S NEXT IPHONES GATHER PACE







The end of the summer traditionally means many things, including lower temperatures, less sun and formerly lush green trees turning brown – as well as, of course, speculation about what forms Apple's next iPhones could take. Such has been the case over the past week, with several stories giving us a slightly more concrete sense of what the Cupertino giant's next generation handsets might look and feel like.

As our magazine went to press, Apple was yet to confirm an exact date for its next keynote; nonetheless, there are certain clues about the likely date that we can glean from past iPhone launch events.

There certainly doesn't seem to be much doubt about the likely month in which the next iPhones will be unveiled, with CNET explaining that it would probably be September, on the basis that "the timing for this annual ritual has now hardened into a reliable tradition."

The site **points out on its rumors page** that while the first few iPhones stretching back to the original model's 2007 debut were launched in June, 2012 saw the Californian firm switch to an early September timeframe, which it has stuck to ever since, with the exception of the off-cycle iPhone SE.



#### 9/12

What's more, the fact that Apple consistently holds its iPhone announcement events on a Tuesday or Wednesday during the first two weeks of September enables us to be even more confident about when the next keynote will probably be. The anniversary of 9/11 can be ruled out, so realistically, Wednesday 12th September remains.

There are also practical signifiers. Media invites have to go out all over the world and as of the time of this article being written, there were no reports of any tech journalist having received theirs yet. If the event was in the first week of September, there would have presumably already been indications of such invites being sent. Furthermore, Labor Day on Monday 3rd September makes for an already-busy travel week.

Another key tell is that German carriers have reportedly indicated **pre-orders for the new iPhones will begin on Friday 14th September**, which would fit the usual two or three-day window after the keynote if the 12th was, indeed, accurate.

#### **X MARKS THE SPOT**

So, what do we know or suspect about the new iPhone range? Well, several reports are presently leading us to expect a bumper range of announcements, with not one or two, but three new iPhone models named and demonstrated at the event. The iPhone X is the flagship of the current Apple generation with the catchiest name and design features, and it is on the foundations of this model that it is thought the new phones may be built.

The look and feel of the iPhone X is now engrained in the consumer's mind, so it won't be a surprise if the new range largely resembles this device in design and appearance.

Of the reported three new devices, we'll start with the highest-end model. There are no officially released names or iterations for these devices yet, although seasoned Apple watchers reckon we might see an S suffix. This would theoretically make for an XS model, but of course, it's all still speculation.



#### **BIGGER, FASTER, BLACKER**

It is surely inconceivable that the new phone will not have a faster processing chip and speed, most likely with a larger internal memory and phablet-sized screen similar to the iPhone Plus, of approximately 6.5 inches. Bloomberg **also expects the top-end device to have dual SIM card slots**, at least in certain countries and probably not China, meaning that international travelers and business users will be able to switch between networks seamlessly upon landing. We have a set of

000

It is also anticipated that the new phones will have quicker charging times through the Lightning port. However, a small but significant detail reported last month was that **the new phones were not expected to have the Lightning to 3.5mm adapter dongle** that shipped as standard last year. This means that

users will have to use their existing one or upgrade to a pair of Bluetooth-only ear-buds. It would appear that the headphone jack has finally been killed.

The top-end and middle-range models of iPhone have been widely trailed to have stateof-the-art OLED screens that are crystal-clear, tough and boast a far better contrast ratio than an LCD screen, as well as deeper blacks. The screen size and interactivity offered by OLED also raises another intriguing factor, as it has been reported that **the Apple Pencil will work with the new screens**.

00000

#### "IN MATTERS OF STYLUS, SWIM WITH THE CURRENT"

The Pencil itself is a controversial device among Apple fans, but broadening the base of products on which it can be used from just the iPad Pro would presumably help it to gain traction, especially on the larger-sized phone. Steve Jobs himself was stylus-agnostic, claiming that "nobody wants a stylus with a smartphone", although as Apple would point out, the Apple Pencil is not a stylus. It is a drawing tool, and Jobs said nothing about them.

We haven't touched yet in this article on the new camera capabilities of the new phones, although we did do so back in July when analysts identified a triple-lens system that could use true stereoscopic imaging.

As well as sounding impressive, this means that the software could take images of an object from various angles, allowing the iPhone to act as a true Augmented Reality (AR) measuring device and creation tool. This AR flexibility has already been acknowledged by Apple, which launched the ARKit software framework last year to make it easier for developers to add AR features to their apps.

#### **COOK'S ARK**

One thing we can much more safely predict is that the new iPhones will come with **the latest upgrade to the Apple iOS system – 12**.

We have looked at the improvements in the various betas that have been trialed leading to the final launch, but **it is undoubtedly exciting that the new OS will have** Memoji creation, Siri shortcuts, notifications improvements and a re-skinned, rebooted Apple Maps straight out of the gate, with the much-vaunted Group FaceTime functionality available either for launch or just after it through an update.





It has also been suggested that the latest affordable iPhone will come equipped with an LCD screen similar to the iPhone 8 and 8 Plus that it is expected to replace. However, the main selling point of the newer phone may be its rumored availability in a range of colors.

Meanwhile, if speculation is to be believed, the middle-range phone that is coming would appear to be a direct upgrade on the current iPhone X with a 5.8 inch OLED screen and glass back, as well as an improved processor, memory and camera technology.



#### **IN LIVING COLOR**

Ironically, the most interesting phone in the range could be the cheaper version, codenamed N84.

There has been talk that this entry-level device will sport a 6.1-inch LCD screen instead of an OLED panel and aluminum edges instead of a stainless steel casing. So far, so iPhone X copy... but **what if you could get it in different colors? As we reported last month**, rumors suggest that the phone may come in gold, grey, white, blue, red and orange designs at launch, with leather cases available in such hues as flash yellow, bright orange and electronic blue.

It surely makes economic sense for Apple to have a lower-priced model, but also strategic sense. Apple has been fighting an uphill battle for new users in the Asian and especially African markets, as consumers in these territories are more concerned with bigger screens than highclass specs. All of the new range is expected to come with Face ID, but a larger screen is key to competing, although Western consumers may be confused by a phone with a large screen size and lower range specs than their own current device.

As well as the iPhones, there are expected to be announcements at the event on improved AirPods, AirPower wireless chargers, a new Apple Watch and iPad Pro tablets. However, the launch of new iPhones will surely always be the spiritual highlight of the year for Apple followers, and will inevitably set the narrative for the direction and fortunes of the company for the next 12 months and beyond.

0000



## READ over **9000+** digital magazines anytime, anywhere

# Download and Read it on Magzter



From your Apple iPad please go to App Store and search for Magzter



From your Apple iPad please go to App Store and search for Magzter



https://www.magzter.com



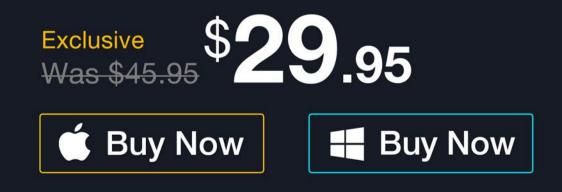


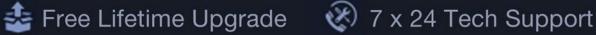
Video Conversion Has Never Been So Fast & Easy

Learn More >>



- Convert 4K/HD/SD Videos & Audios MKV, MOV, MP4, MP3, etc in fastest speed
- Download YouTube Videos and Music Facebook, Vimeo, Vevo and 300+ sites
- Convert Videos for Media Devices Playback on iPhone, iPad, Android and more
- Edit Videos and Record Screen Add subtitle and make photo slideshow





SUPERCYCLE: iPHONE EVENT COULD INCLUDE BIG SURPRISES



#### **A TRIPLE THREAT**

With Apple's September event now just weeks away, the rumor mill is in overdrive, with analysts and enthusiasts all weighing in and sharing their expectations for the next iPhone lineup. 2018 has been a strong year for Apple, with continued growth in its Apple Music service, and record earnings quarters helping Apple to become the world's first public company worth more than one trillion dollars.

12:13

But what's next for Apple? Of course, the company is expected to venture out into new products and services, with a rumored Apple Car and a Netflix-style subscription service already in the works, but in the meantime, all

eyes are on the hardware. Last year's iPhone X revolutionized smartphones once more, what with the removal of the home button, the introduction of 'the notch' and the inclusion of facial recognition. This year, Apple must build on the success of its new flagship smartphone, increase its sales and encourage more of its customers to part with more of their cash (the iPhone X was the most expensive iPhone in history, at \$999).

11 ?

Today, we take a closer look at the next 'supercycle' for Apple, with the company expected to launch three new iPhones, including a Chinese-exclusive to dominate international markets.





#### CHINA-ONLY iPHONE MODEL

In perhaps one of the most exciting and unexpected rumors in recent iPhone history, Apple is expected to begin this year's September product unveils with a brand new device designed specifically for a Chinese market. According to a **report from a reputable Taiwanese entertainment website United Daily News**, Apple has began production on a budget LCD iPhone model, which will be Apple's first dual-SIM device.

Friend of AppleMagazine Guilherme Rambo has already confirmed that he expects a brand new budget model to join the new iPhone X after he posted a screenshot of the Apple Developer Tool confirming support for three new models. According to Rambo's research, the new model will have an Apple A10 processor, **a P3 display**, **and the same subtype as an iPhone 7**.

GBH Insights' report into 2018 iPhone sales is also a clear indicator that the company is set to release new models. The company published its annual report, suggesting that there will be "a major product cycle on the horizon" and a "trifecta of next-generation iPhones on the horizon and the Street modeling shipments of roughly 220 million units."

According to recent data, an incredible 1.3 billion iPhones are in use around the world; an eye-watering 25 percent of all users upgrade their devices every year. Apple's annual product unveils, which conveniently precedes the holiday season, has allowed the company to enjoy impressive Q4 earnings, with many techsavvy consumers ready to upgrade to the latest and greatest model. The exception to that rule, however, is the iPhone SE. Rumors of a revived iPhone SE have been rife, with many **predicting that the company will still launch a new low-cost smartphone** to appease a budget-conscious consumer base. However, these new reports may be incorrect, with the proposed smaller smartphone, in fact, being the dual-SIM Chinaonly model.

Dual SIM smartphones are popular in China, mainly because Chinese consumers want to keep their old numbers to remain in contact with friends and family. For the majority of consumers, however, the reason for a Dual SIM is so that they can separate their work and private life, or keep their number from a city, like Beijing or Shanghai, when they move elsewhere with family.

It's no secret that Apple has struggled to maintain its position as a top smartphone manufacturer in China, where competition from homegrown alternatives is rife. Android-based smartphones that can be sold for much less than the cost of an iPhone have been clawing back some of the market share, **with Huawei, Oppo, Vivo, and Xiaomi proving popular options for consumers**. A low-cost iPhone model that's in budget and meets the demands of modern Chinese consumers will allow the company to increase its dominance within the territory and crack one of the most challenging but lucrative markets in the world.

#### **NEXT GENERATION iPHONE X**

Alongside the launch of a new low-cost smartphone for Chinese consumers, Tim Cook will reportedly unveil the next generation iPhone X at Apple's September event, which is set to be held within the first two weeks of the month. All eyes will be on the successor to the iPhone X, which is now Apple's best-selling smartphone, **according to a report from BGR**.

Rather than a single iPhone X, as was unveiled last year, the company will reportedly follow tradition and release a flagship model and a Plus version. Latest rumors suggest Apple will release an iPhone X with a 5.8-inch display - the size of the current X - and one in a larger 'Plus' 6.5-inch model. Notable Apple analyst Ming-Chi Kuo believes **that the new iPhone will have the same 1125 x 2436 resolution** as the previous model, whilst the larger model will offer between 480 to 500 pixels per inch, and a **screen resolution of 1242 x 2688, bringing it closer to the density of the 5.8-inch model**.

The model is also expected to include Gorilla Glass 6, which is more durable and can withstand more drops than the previous version of the glass. Indeed, as the front and back of the iPhone X is made from glass, the technology will **"reduce the inherent fragility of glass backs and displays"** and give users more flexibility with their phones.

Design-wise, the new iPhone X models are expected to look the same as 2017's models, albeit in a larger size for the Plus model. However, as well as silver and space gray, the company will reportedly launch a gold version of the smartphone, too. Indeed, a





Federal Communications Commission filing shows **Apple had worked on a Gold iPhone X, but the color wasn't released**. One small design change expected in the 2018 X models, however, is a larger rear camera to accommodate a larger camera sensor. This will no doubt lead to better quality imagery and more advanced features for photographers.

iPh



#### IMPRESSIVE HARDWARE IMPROVEMENTS

Early benchmarks from the 2018 iPhones have already surfaced on Geekbench, with the new **iPhone X reportedly ten percent faster than its predecessor thanks to a brand new A12 chip**. With huge advancements in augmented reality technology in recent years, and the launch of an array of new features and functionality in iOS 12, more processing power will no doubt allow developers to create bigger and better software and push technology further ahead.

Another exciting development relates to the Apple Pencil, with rumors suggesting the iPhone X will support the pencil for the first time. Apple will no doubt want to capitalize on the success of the Samsung Galaxy Note by **allowing users to interact with their smartphone using a stylus**.

Moving away from the phone itself, Apple is expected to ship its brand new iPhone X models with an 18W USB-C power adapter and USB-C to Lighting cable, which would allow for fast charging functionality without the need to purchase additional hardware. Images of the US prototype have surfaced online, featuring a compact body in the style of the MacBook charger. Thanks to a new wireless charging coil made from copper wire, rather than the ferrite polymer composite used in the current iPhone lineup, the new technology would enable faster and more efficient charging. Apple is also expected to limit third-party fast charging on its iPhone X lineup to ensure safety, and ask manufacturers to apply for





USB-C Authentication certification. Without the certification, **Apple may limit charging speeds**, **displaying a warning and charging at just 2.5W to protect its battery**.

Whether you've been an Apple fan from day one or you're new to the fold, there's no doubting that the iPhone X is one of the world's most advanced smartphones. The changes expected in this year's model, alongside the possibility of a new Chinese-exclusive model, will no doubt give Apple another impressive earnings quarter, and give consumers even more great technology. Investors, critics, and Android, it's time to get ready: the next iPhone supercycle is coming.



## SAMSUNG'S \$1,000 NOTE 9 IS GREAT-BUT SO IS THE CHEAPER S9

For \$1,000, the premium Galaxy Note 9 is a superb phone that showcases the best Samsung has to offer.

It's also the phone most of you won't need. That's because you can get many of the same features in Samsung's Galaxy S9 for a few hundred dollars less.

The Note 9, available last week, is the Android smartphone for those who want the latest and the greatest. There's a larger battery, with a 21 percent boost over last year's Note 8 model. The Note 9 gets 128 gigabytes of storage, double what's in the S9 and Apple's iPhones. And of course, a large screen.



But there's not much "wow" beyond that. Smartphone innovation has slowed down in recent years. It's more noticeable with Samsung because the company spreads out those innovations between two major smartphones each year. One phone inevitably plays catch up with the other every six months.

So now we find that the Note 9 is getting the zippy processor and cellular speeds the S9 phones first offered earlier this year. It's also getting the S9's dual-aperture camera for better low-light shots as well as its gimmicky, but superfun, ability to take video with super-slow motion.

And the S9 starts at just \$720 through T-Mobile, and about \$800 through Verizon, AT&T and Sprint. A Plus version that's closer in size to the Note 9 costs \$840 to \$930.

True, the Note 9 offers a little more wowness. Its camera uses artificial intelligence to optimize colors and lighting for what you're trying to shoot, be it food, a sunset or flowers. Many low-light shots were even better than what the S9 produced, even though both share the second aperture designed to let in more light when needed.

Of course, you're likely to see this feature in the S10 in about six months.

SUNI

That brings us to one of the Note's remaining distinctive features, its stylus. It's useful for handwriting notes and signing documents on the screen. Now, it can control digital slideshows and music playback, too. The new stylus gets Bluetooth to double as a remote control. Selfies won't look as awkward when you don't have to reach for the on-screen button; just press the pen to snap the shutter.





Unfortunately, there isn't a lot the remote feature can do yet. It's a promising feature — but could remain mostly a promise if app developers don't take advantage of it.

Many past Samsung features failed to gain traction because app developers couldn't be bothered to make the tweaks needed. For instance, Air View was supposed to offer popup previews just by pointing to an email and calendar entry, but it mostly worked only with Samsung's home-grown apps.

More recently, there's Bixby, Samsung's own digital assistant. While Samsung has worked directly with some services, including Uber and Spotify, on integrations, developers have largely prioritized Amazon's Alexa and the Google Assistant. It comes down to a chicken-or-egg problem: People need to see compelling capabilities to use a feature; developers need to see a strong base of users to spend the time developing compelling capabilities.

The stylus remains the Note's signature feature, with or without extensive remote capabilities. No doubt the new edition will appeal to diehard Samsung fans, hard-core gamers and on-the-go executives who are on their phones constantly and need the battery and storage boost. Though the Note 9 uses the same processor as the S9, it has a new cooling system designed to let you use those faster speeds longer.

But if you're not someone who needs all that power, you ought to take a second look at the cheaper, six-month-old S9.

## ELECTRIC CAR MAKERS MOVING INTO TESLA'S TURF WITH NEW MODELS

While Tesla grapples with internal issues like production delays, a sometimes-erratic CEO and a recent about-face on whether to go private, its rivals are moving aggressively into the luxury electric vehicle space.

In the next few days, German competitors Mercedes-Benz and Audi, the luxury arm of Volkswagen, are both showing off productionready electric sport-utility vehicles aimed at Tesla's Model X.

Meanwhile Jaguar Land Rover offers the I-Pace electric SUV while further out, Porsche is taking on Tesla's Model S high performance luxury car with the Taycan, expected to reach the market in late 2019.

The established carmakers have multiple motives. They need zero driving emissions vehicles to meet tougher greenhouse gas limits coming into effect in Europe in 2021. Diesel is in the doghouse. And China, a major market, is pushing hard for more electrics.





But the new models will also aim to win back some of the luxury customers drawn away by Tesla's electric vehicles at a time when the company is consumed by multiple distractions. Its CEO, Elon Musk, took to Twitter on Aug. 7 to abruptly announce he had secured funding to take his company private, only to turn around 17 days later to say that Tesla would remain public. The electric carmaker is also facing financial pressure, with a \$230 million debt payment that's due in November on top of the \$920 million that must be paid off three months later. And it has only recently hit production targets for its Model 3 mass-market vehicle.

In the meantime, its rivals — who had emphasized diesel and hybrids — are finally rolling out the leading edge of what they say will be a slew of all-electric models. Their latest offerings are "the vanguard" of more to come, said Ferdinand Dudenhoeffer, director of the Center for Automotive Research at the University of Duisburg-Essen.

"By 2020, Tesla must stabilize itself or be overtaken," he said.

The new entrants challenge what has been one of Tesla's key selling points: range. The EQC sport utility crossover from Daimler AG's luxury brand Mercedes, for instance, should go up to 500 kilometers (300 miles) on a single charge. That's comparable to Tesla's SUV, the Model X, which has a range of up to 295 miles. The EQC, to be unveiled outside of Stockholm on Sept. 4, is the first in the Mercedes EQ sub-brand that bundles the company's efforts in electric, connected and autonomous driving. Media representatives didn't provide a price ahead of the unveiling.





Volkswagen's Audi will show off its e-tron in San Francisco on Sept. 17. It offers more than 400 kilometers (248 miles) on a single charge. The company says the e-tron should be able to use high-speed charger facilities — if they're available — to charge in less than 30 minutes. The German price will be around 80,000 euros (\$93,000) and it should go on sale near the end of the year in Europe, and next year in the U.S.

The Porsche Taycan will also pose a stiff challenge to Tesla's Model S in terms of range: Porsche claims it can load enough power for 400 kilometers (248 miles) in just 15 or 20 minutes. The company hasn't announced a price. The I-Pace, whose price starts at \$69,500 before local and federal incentives, offers 292 miles (470 kilometers) under the tougher European Union standard. The Model S, meanwhile, has a range of up to 335 miles.

The starting price for Tesla's Model X is around \$80,700 while the Model S is around \$74,500.





Not that Tesla is standing still while the competition laps it. Musk has said the company intends to develop a Model Y, a small SUV to be unveiled in the first half of next year — a growing sales category that other carmakers have been piling into as fast as they can.

But Tesla's ambitions go way beyond the luxury electric vehicle market. That's the whole point of the Model 3, which is aimed at the mass market with a starting price of \$35,000 and an EPA range of 310 miles. But there, too, the company must go head to head with rivals. They include the BMW i3 with a starting price of \$44,500 and an EPA range of 114 miles; the Nissan Leaf with a starting price of \$30,000 and an EPA range of 151 miles; and the Chevrolet Bolt with a starting price of \$37,495 and an EPA range of 238 miles. Nissan promises a longer range version of the Leaf for 2019 and in 2020, Volkswagen plans to launch a compact version of its all-electric ID lineup.





Tesla's Supercharger network has a big advantage over competitors. The company's website says it has 1,332 fast-charging stations with 10,901 charging units worldwide. Electric cars made by other manufacturers can't use Tesla stations and public and private charging stations are sporadic. European carmakers are rolling out their own fast-charging highway network through a joint venture, but only a few stations are up and running.

Chris Hopson, manager of North American light vehicle forecasting for IHS Markit, said that established manufacturers are going electric not just in response to Tesla, "but because of a whole host of other things, with Tesla in mind." New electrics serve "not just to alleviate some of sales

0C \



going to Tesla but to also to grab hold of the ongoing trend globally toward electric vehicles."

The electric push also comes in the wake of Volkswagen's 2015 diesel scandal. The company's illegal rigging of vehicles to cheat on emissions testing helped turn consumers off diesels. Falling diesel sales numbers make it harder for European car makers to meet lower fleet emissions requirements coming into force in the EU in 2021.

China is also pushing for more electric vehicles through regulation, requiring carmakers to

ensure 10 percent of their fleets are electrics in 2019. Regulations limit foreign brands to about 4 percent of the market, with Tesla owning half that. Other carmakers such as BMW, Ford and GM work with local partners.

Analysts James J. Albertine and Derek J. Glynn said they do not see competition as a threat to Tesla, "but a validation of electric vehicle technology that will grow the global electric vehicle demand pie, of which Tesla is likely to maintain a significant share."





### UBER HEADS IN NEW DIRECTION WITH TOYOTA ON SELF-DRIVING CARS

Uber is teaming up with Toyota to build selfdriving cars for its ride-hailing service after its efforts to do it alone were derailed by a fatal collision and allegations of high-tech theft.

Toyota, based in Japan, is also investing \$500 million in Uber as part of the alliance announced this week.

The deal aims to combine the best features from the two companies' work on autonomous technology into cars that will be picking up Uber's customers by 2021. By the time that happens, Uber hopes to have completed an initial public offering of stock that will enrich a list of early investors that now includes Toyota. Those investors have been pouring billions of dollars into Uber's revolutionary ride-hailing service that still hasn't proven it can make money since its inception nearly a decade ago.

Uber is counting on self-driving cars to help it turn the financial corner by reducing the need to pay human drivers who arrive to pick up passengers in private vehicles summoned through a smartphone app.

By expanding into autonomous vehicles, Uber also hopes to ward off a looming competitive threat from another early investor, Google and its self-driving car spin-off Waymo, which is poised to launch its own ride-hailing service in Arizona before the end of this year.

AUTON

DR

"Our goal is to deploy the world's safest self-driving cars on the Uber network, and this agreement is another significant step towards making that a reality," said Uber CEO Dara Khosrowshahi.

Meanwhile, Toyota is trying to evolve from a pure automobile maker into a "mobility company," as are many of its industry peers, including General Motors and Ford in the U.S. That crusade has prodded decades-old automakers such as Toyota and GM to invest in and partner with technology companies working on self-driving cars while also opening up their own research hubs in Silicon Valley.

Besides allowing them to lean on each other's respective strengths, Toyota's deal with San Francisco-based Uber also will help the two

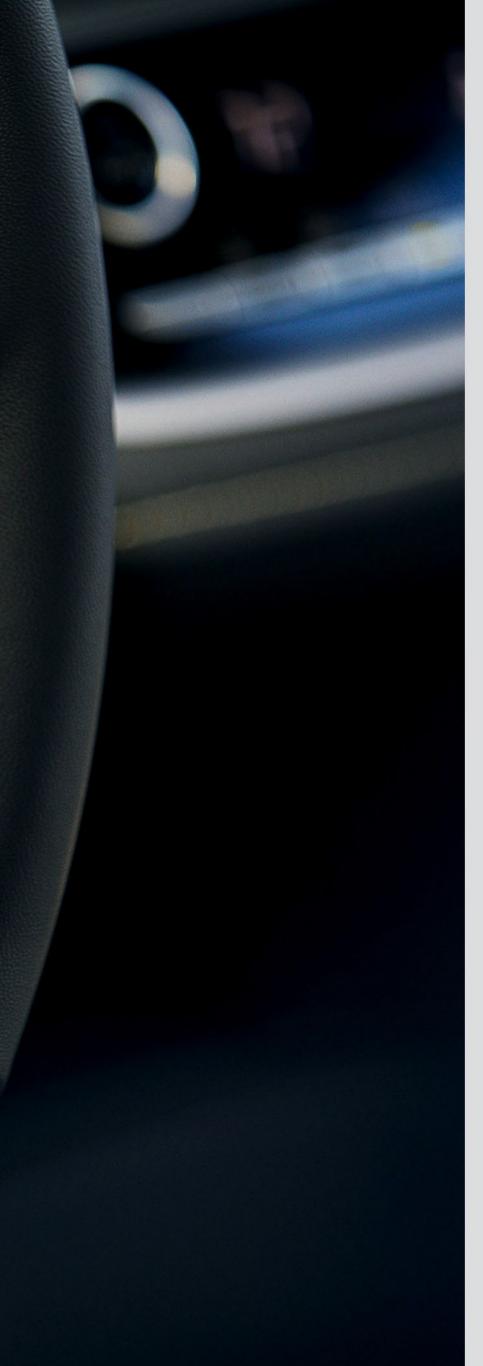
# OMOUS

NING

A LANGER MAN



+ RES 104 CANCEL R - SET 10 DDI MA MODE 62



companies spread out the cost of designing and building the complex systems, which use computers, cameras, radar and laser sensors to guide the self-driving vehicles.

Uber is turning to Toyota for help in autonomous vehicles five months after one of its self-driving cars ran over and killed a pedestrian crossing a dark street in Tempe, Arizona.

The March 18 crash prompted Uber to temporarily suspend its work on its self-driving car program while conducting a safety evaluation.

Authorities determined the sensors on Uber's self-driving car sensors spotted the pedestrian, 49-year-old Elaine Herzberg, but the vehicle's automatic-braking function had been disabled in favor of a human backup driver. Tempe police said the driver was distracted and streaming a television show before the crash.

Uber had little choice but to find a self-driving car partner after the collision that killed Herzberg, said Navigant Research analyst Sam Abuelsamid.

"It's going to be tough for them to build consumer trust in whatever it is they're developing," he said. "I think that people will have a lot more trust in Toyota to do this the right way, to take due care and make sure everything is properly tested and evaluated."

Uber's expansion into self-driving cars suffered another setback last year after Waymo accused it of stealing its technology in an elaborate scheme. The case went through one week of a highprofile trial before Uber agreed to pay Waymo \$245 million in stock to settle the allegations without acknowledging wrongdoing.



## Q&A: AT&T ENTERTAINMENT EXEC ON FUTURE OF VIDEO

David Christopher, who runs AT&T's wireless and entertainment businesses, has a bird's eye view of how streaming media and video are evolving.

AT&T recently completed its \$85 billion purchase of Time Warner, a deal designed to help traditional media companies compete better with nimble tech services such as Netflix. Soon after the deal closed, AT&T launched WatchTV, a \$15-a-month streaming service that offers more than 30 TV channels, including Time Warner channels TNT and TBS. We spoke with Christopher about how people are consuming media and what role wireless companies play. Remarks have been edited for clarity and length.

**Q:** Why do you think customers will choose Watch TV over other TV packages?

**A:** There's no "one size fits all" anymore for video. Video is increasingly very personal and we think Watch TV is a great fit for many customers that want a smaller bundle of content.

**Q:** How else can AT&T use the Time Warner content?

A: There are lots of opportunities that we envision to drive innovation on behalf of consumers. You could have the ability to share a portion of a TV show that you thought was really funny or really impactful. You could have the ability to create a personalized news channel, or the ability to follow a particular athlete or star with personalized video coming right to your phone.







**Q:** How are people's viewing habits evolving?

A: There's a dramatic shift toward digital and a dramatic shift toward mobile. The number of hours people are watching linear television is dropping. The number of hours on mobile and digital is rising. It's particularly true among young audiences. It's less about only watching on your big screen and much more about watching what's specific to you on a more personal device.

We think those trends will continue and will be augmented by other technology, like augmented reality, mixed reality, virtual reality. Much more mobile consumption, much more consumption of other ancillary devices. It's why we are excited about the combination of our mobile network plus content.

**Q:** What about the state of the broadband and wireless industry?

A: It's a great time to be a consumer in the U.S. Video demand is driving up consumption dramatically, and costs are declining rapidly. According to Recon Analytics, the cost per megabyte has fallen from \$1.37 in 2007 to less than a third of a cent in 2017. In the next five years people are going to be consuming more premium content than today, not less. And it's going to be happening more and more over mobile.

When you step back and look at the advent of 4G, people couldn't envision how ubiquitous Airbnb, Uber, Spotify and other things we live our lives by would become. That same thing is true for (the upcoming, faster) 5G, so it's an exciting brand new world.





#### BILL GATES DIRECTS EDUCATION FUNDING TO POOR US SCHOOLS

Marking another phase in his education agenda, Bill Gates is now taking a more targeted approach to help struggling U.S. schools.

The Bill and Melinda Gates Foundation is now funding groups working directly with clusters of public schools in some of the most impoverished regions of the country. Many of those third-party groups already had relationships with the world's largest philanthropy, and some of the grants went straight to a school district and charter schools organization.

The foundation announced the first round of nearly \$100 million for 19 program initiatives for middle and high schools in poor communities across 13 states. Gates pledged \$460 million over the next five years to fund networks of school programs that help low-income and minority students get to college.





The grants will address the whole scope of what it takes to get those students to college — from academic skills like math and english proficiency, to existential pitfalls like middle school suspensions and the college application process.

It's also another indication that the Microsoft cofounder and billionaire philanthropist is trying to be less prescriptive with top-down ideas that have rankled some educators. Critics have said the foundation's work over the past decade has included trial-and-error programs that haven't accomplished as much as hoped to help vulnerable children succeed in school.

"We're not inventing anything in this strategy. We're taking what we learned from research and experience," said Bob Hughes, who leads Gates' K-12 education program.

Letting local and regional forces take the lead marks a departure from the national or systemwide education initiatives that Gates previously supported, including majorly consequential directives over academic standards, teacher evaluations and school sizes.

Here's a look at some of the Gates Foundation's educational funding over the past two decades:

### **NETWORKS FOR SCHOOL IMPROVEMENT**

SINCE 2018 ' \$460 Million

Gates is granting money for specific proposals submitted by various groups, public school districts and charter school networks to support and expand programming ideas aimed at helping low-income children.

Among the grantees is the San Diego-based High Tech High Graduate School of Education.



The program's provost Ben Daley said the school will use the money to help students navigate what can be an overwhelming college admissions process that includes trying to get financial aid, transferring credits and following up on college acceptance letters.

Daley said that work will be more nuanced than layering more programming on top of what's already offered, so that it can be a "simple, engaging and positive" resource for kids across 30 public, charter and alternative high schools in his region.

"We know if it's just like 'more.' That's not going to work," Daley said.

### COLLEGE SCHOLARSHIPS

1999-2018' \$1.6 BILLION

The most enduring Gates Foundation program was the Gates Millennium Scholars.

Gates wanted to foster diversity in sciencerelated fields with college scholarship money. More than half of the 20,000 scholarships went to lower-income minority students whose parents hadn't gone to college. Gates also supported recipients when many went on to graduate school with hopes to diversify leadership in those fields.

That program officially ended in 2018, though the scholarship model lives on as the new Gates Scholars program, which is limited to undergraduate studies.

### **COMMON CORE**

### 2008-2017 ' \$280 million

Gates used his money and celebrity to support the Common Core State Standards because he believed it ensured all kids got an equally good education. The academic standards determined what kids should learn, but doesn't set the curriculum or determine how kids learn.

His success was evident when nearly all states initially adopted it, but President Barack Obama's support became politically problematic.

Obama's administration created incentives benefiting Common Core's roll-out, which critics slammed as tantamount to federal overreach. The teachers and parents who also soured on the standards claimed a formulaic approach to education was confusing and detrimental to the learning process.

### **TEACHER QUALITY AND EVALUATIONS**

### 2009-2015 ' \$257 Million

Gates set out to quantify what it takes to be a good teacher and partially funded school districts that were piloting ways to measure and improve teaching. But the idea to tie student test scores to teacher evaluations upset some teachers.





The program ended poorly. An independent Rand Corporation report commissioned by Gates said the endeavor failed to substantially improve the learning process for either teachers or students. Hillsborough County Public Schools in Tampa, Florida was left scrambling financially after the Gates money disappeared.

### SMALL SCHOOLS

### 2001-2009' \$345 million

Convinced that smaller schools with specific interests could foster better, more motivated learning for the most at-risk students, Gates spent millions testing how to break up the large comprehensive high school model.

But schools struggled with the logistics of multiple academies under the same roof and communities felt disconnected by the changes. The academic gains were in some cases impressive but limited in scope. Gates chalked it up to the financial and political cost of changing traditional schools.



#### LIBRARY TECHNOLOGY

#### 1999-2007 ' \$325 million

Bill and Melinda Gates' first major charitable effort was to install personal computers and internet access in libraries. Then known as the Gates Library Foundation, the initiative was eventually absorbed into their namesake, Seattle-based foundation that is today the world's largest private nonprofit.

The man who led the computing revolution and his wife — a former computer programmer and Microsoft manager — gave money for computers, internet and librarian training.

The library program ensured 10,000 libraries — or 99 percent of all public libraries at the time — across the country had access to the new technology, particularly in low-income communities.







### GOOGLE DENIES TRUMP CHARGE IT RIGS TRUMP NEWS SEARCHES

President Donald Trump is accusing Google and other U.S. tech companies of rigging search results about him "so that almost all stories & news is BAD" — and though he is offering no evidence, a top adviser says the White House is "taking a look" at whether Google should face federal regulation.

Google is pushing back sharply, saying Trump's claim simply wasn't true: "We never rank search results to manipulate political sentiment."

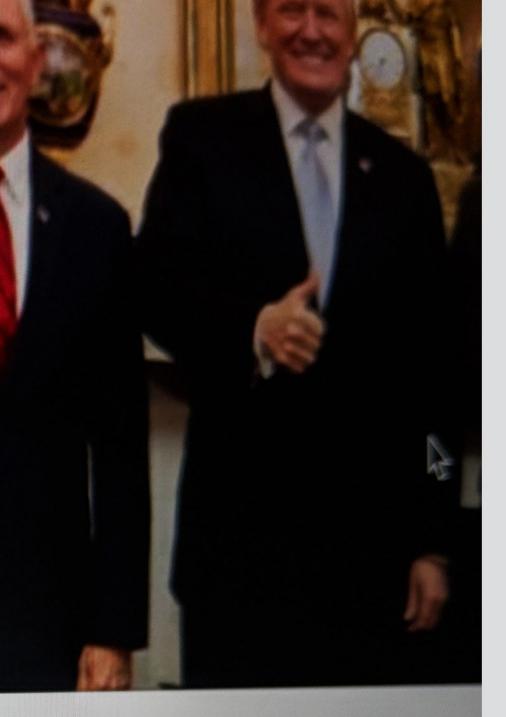
The president's tweets Tuesday echoed his familiar attacks on the news media — and a conservative talking point that Californiabased tech companies run by CEOs with liberal leanings don't give equal weight to opposing political viewpoints. They also revealed anew his deep-seated frustration over not getting the credit he believes he deserves.

The president, who has said he runs on little sleep, jumped onto Twitter before dawn Tuesday



President Donald Trump says Google and other tech companies are "treading on very, very troubled territory".

# Donald J. Trump ♥ @realDonaldTrump 45th President of the United States of America



# TweetsFollowing37.6K46

# Tweets



Donald J. Trump Control Crippling loopholes in or criminals to infiltrate our close these loopholes, in Release, Democrats mu

Tweets & rep

to rehash his recent complaints about alleged suppression of conservative voices and positive news about him.

He followed that up with vague threats in Oval Office comments.

"I think Google has really taken advantage of a lot of people, and I think that's a very serious thing. That's a very serious charge," Trump said, adding that Google, Twitter, Facebook and others "better be careful, because you can't do that to people."

Trump claimed that "we have literally thousands and thousands of complaints coming in. ... So I think that Google and Twitter and Facebook, they're really treading on very, very troubled territory and they have to be careful."

Larry Kudlow, the president's top economic adviser, told reporters later that the White House is "taking a look" at whether Google searches should be subject to some government regulation. Trump often points proudly to his cutting of government regulations as a spur for economic gains.

In his tweets, Trump said — without offering evidence — that "Google search results for 'Trump News' shows only the viewing/reporting of Fake New Media. In other words, they have it RIGGED, for me & others, so that almost all stories & news is BAD. Fake CNN is prominent. Republican/ Conservative & Fair Media is shut out. Illegal?"

He added, again with no evidence, that "96% of results on "Trump News" are from National Left-Wing Media, very dangerous."

A search query Tuesday morning, several hours after the president tweeted, showed stories from CNN, ABC News, Fox News and the MarketWatch business site, among others. A similar search later in the day for "Trump" had Fox News, the president's favored cable network, among the top results.

Google, based in Mountain View, California, said its aim is to make sure its search engine users quickly get the most relevant answers.

"Search is not used to set a political agenda and we don't bias our results toward any political ideology," the company said in a statement. "Every year, we issue hundreds of improvements to our algorithms to ensure they surface high-quality content in response to users' queries. We continually work to improve Google Search and we never rank search results to manipulate political sentiment."

Experts suggested that Trump's comments showed a misunderstanding of how search engines work.

Google searches aim to surface the most relevant pages in response to a user's query, even before he or she finishes typing. The answers that appear first are the ones Google's formulas, with some help from human content reviewers, deem to be the most authoritative, informative and relevant. Many factors help decide the initial results, including how much time people spend on a page, how many other pages link to it, how well it's designed and more.

Trump and some supporters have long accused Silicon Valley companies of being biased against them. While some company executives may lean liberal, they have long asserted that their products are without political bias.

Media analyst Ken Doctor said it doesn't make sense for mass-market businesses like Google









to lean either way politically. He characterized the complaints as a "sign of our times," adding that, years ago, if the head of General Electric was supporting a Republican candidate, people who disagreed wouldn't then go out and boycott GE products.

"The temperature has risen on this," Doctor said.

Steven Andres, who teaches about management information systems at San Diego State University, said people often assume that if you give a computer the same inputs, no matter where you are, that you "get the same outputs."

But it doesn't work that way, he said. "You're seeing different things every moment of the day and the algorithms are always trying to change the results."

Trump didn't say what he based his tweets on. But conservative activist Paula Boylard had said in a weekend blog post that she found "blatant prioritization of left-leaning and anti-Trump media outlets" in search results.

Boylard based her judgments on the political leanings of media outlets on a list by Sharyl Attkisson, host of Sinclair Television's "Full Measure" and author of "The Smear: How Shady Political Operatives and Fake News Control What You See, Think, and How You Vote." Sinclair is a significant outlet for conservative views.

Trump began complaining about the issue earlier this month as social media companies moved to ban right-wing "Infowars" conspiracy theorist Alex Jones from their platforms. The president also argues regularly — and falsely — that the news media avoid writing positive stories about him and his administration.



Jones is being sued for saying the 2012 shooting massacre at Sandy Hook Elementary School was staged. Jones has since said he believes the shooting did occur and has argued that the lawsuit should be dismissed because he was acting as a journalist.

Trump has praised Jones'"amazing" reputation.

The issue is also of concern on Capitol Hill, where the House Energy and Commerce Committee, chaired by Rep. Greg Walden, R-Ore., recently announced that Twitter CEO Jack Dorsey is scheduled to testify before the panel on Sept. 5 about the platform's algorithms and content monitoring.

# GOOGLE'S SEARCH TOOL TO HELP JOB-SEEKING VETERANS

A new Google search tool will allow service members transitioning to civilian life to include their military occupational specialty code to find jobs that match their skills.

The tool announced this week is part of the tech giant's "Grow with Google" initiative aimed at helping Americans get jobs or grow their businesses. The program also is offering transitioning service members, and their spouses, computer training.

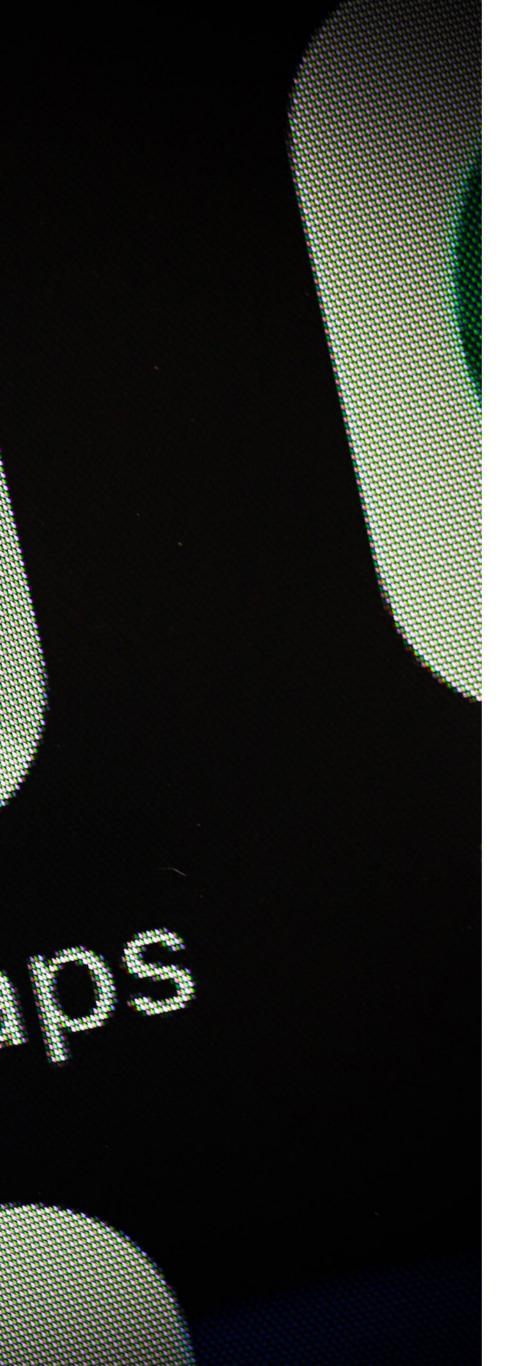
In addition, when users are searching for a place on Android or iOS mobile device or in Google Maps and open a business listing, a "veteranled" designation will let people know which businesses are owned and run by veterans.

The initiatives are part of Google's plans to spend \$1 billion on nonprofit organizations helping to raise education levels around the world.



Sure https://www.google.com ookmarks People Window Help Google Google Search I'm Feeling Lucky 95





### GOOGLE MAPS MISTAKENLY SHOWS 'MCCAIN SENATE OFFICE BUILDING'

Google Maps wasn't waiting for the Senate.

While lawmakers debated a proposal to rename a building after the late Sen. John McCain, Google Maps displayed "McCain Senate Office Building" on its website for several hours Wednesday.

A search for "Russell Senate Office Building" directed users to the same building. The error was fixed later Wednesday.

Senate Minority Leader Chuck Schumer, D-N.Y., proposed renaming the Russell building in McCain's honor after the Arizona Republican died Saturday from brain cancer. Senate Majority Leader Mitch McConnell, R-Ky., said he'll form a bipartisan panel to solicit ideas on ways to honor McCain. Google said in a statement Wednesday that it empowers people to contribute local knowledge to its maps, "but we recognize that there may be occasional inaccuracies or premature changes suggested by users."

It was not clear how the error occurred.

The mix-up comes as President Donald Trump has charged Google and other U.S. tech companies of bias and unequal treatment, including rigging search results "so that almost all stories & news is BAD." On Wednesday, Trump tweeted a video that accused Google of promoting former President Barack Obama's State of the Union addresses on its home page, but not his.

"#StopTheBias," Trump tweeted.

A Google spokesperson disputed the allegation, saying Google's homepage did highlight the livestream of Trump's State of the Union on Jan. 30, 2018. They added that the company has "historically not promoted the first address to Congress by a new President, which is technically not a State of the Union address" and didn't do so in either 2009 or 2017.

The promotion does not appear in screenshots captured by Wayback Machine, an Internet archive site, throughout the day on Jan. 30. But Google provided a link to a Trump-focused Reddit page that features an image of the Google homepage advertising the speech with the words: "Live! Watch President Trump's State of the Union Address on YouTube."

Trump earlier told reporters that Google, Facebook and Twitter "treat conservatives and Republicans very unfairly."









"I think it's a very serious problem because they're really trying to silence a very large part of this country and those people don't want to be silenced," Trump said.

Larry Kudlow, the president's top economic adviser, had told reporters Tuesday that the White House was "taking a look" at whether Google searches should face new government regulation.

But Trump, who often brags of slashing federal regulations, said that wasn't what he's after.

mm

THE P

"You know what we want? Not regulation. We want fairness. When we have fairness we're all very happy," he said.

Google has said they "never rank search results to manipulate political sentiment."

# i unes Review



Trailer





### iTunes **Preview**



by Andrew Erwin & Jon Erwin Genre: Drama Released: 2018 Price: \$12.99

★ ★ ★ ★ ★ 286 Ratings

# I Can Only Imagine

The movie follows the adventures and misadventures of a sports star prodigy turned songwriter and singer, Bart Millard, and his band Mercy Me. The movie follows his beginnings and broken personal relationships until, with the help of a music industry veteran, they find the key to personal and professional success.

### FIVE FACTS:

**1.** The movie cost \$7 million to make.

**2.** It grossed \$85 million worldwide.

**3.** It is the third highest-grossing movie biopic in history.

**4.** MercyMe's "I Can Only Imagine" is the best-selling Christian single of all time.

**5.** The movie stars Dennis Quaid, who starred in The Right Stuff, Frequency and Far From Heaven.







MercyMe - "I Can Only Imagine" Official Music Video



# Always at the Carlyle

There are so many legends swirling around The Carlyle Hotel, which helps to make this documentary centered on the celebrated landmark all the more fascinating. Contributors include the hotel's employees and famous guests.

### FIVE FACTS:

1. An incredible cast talks about their memories of the famous New York hotel, including Woody Allen, Wes Anderson, Anjelica Huston and George Clooney.

**2.** The hotel is located on 35 East 76th Street at Madison Avenue.

**3.** The hotel opened in 1930 and is 426 feet in height.

**4.** The hotel has been owned by Rosewood Hotels & Resorts since 2001.

**5.** President John F. Kennedy owned an apartment on the 34th floor for a decade.



by Matthew Miele Genre: Documentary Released: 2018 Price: \$14.99

12 Ratings







The Carlyle



# Tunes Review

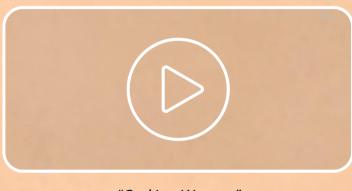


#### iTunes **Preview**



Genre: Pop Released: Aug 17, 2018 15 Songs Price: \$11.99

★★★★ 3.8k Ratings



"God is a Woman"



#### Sweetener Arianna Grande

Ariana Grande's fourth album, Sweetener, is her most introspective and mature, which is hardly surprising given everything that has happened to her in the previous 12 months. She had just performed a triumphant concert in Manchester when a bomb was detonated, killing 22 people and injuring over 500, leaving her "permanently affected". She returned to the city to play a charity concert a year later and says her album was a response. "I wanted to give people a hug, musically".

#### **FIVE FACTS:**

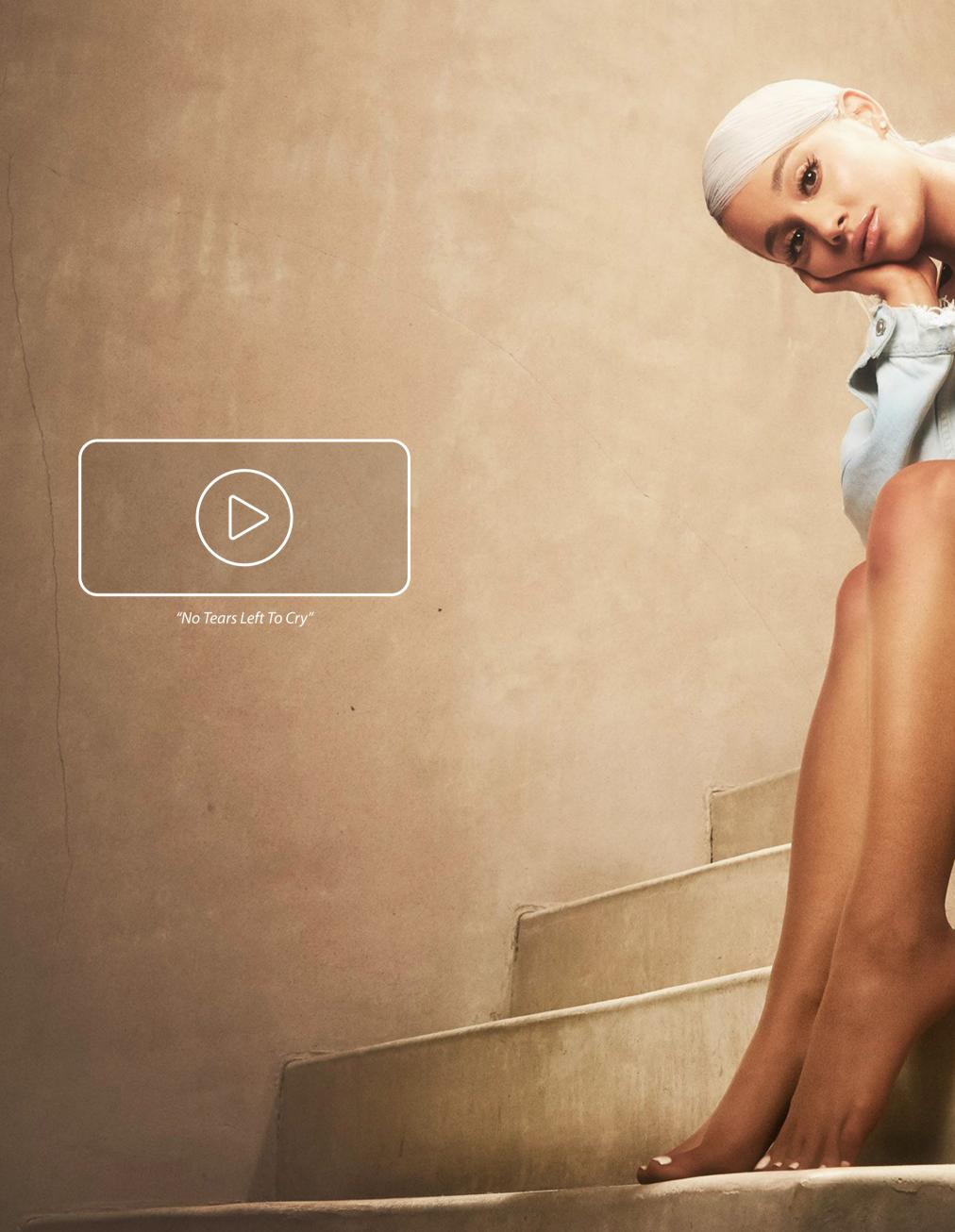
**1.** Ariana has won three American Music Awards, three MTV Europe Music Awards and two MTV Video Music Awards, and has been nominated for a Grammy Award four times.

**2.** Ariana is the first artist in music history to have the lead single from their first three albums debut in the top 10 singles chart in the U.S.

**3.** She recently got engaged to actor and comedian Pete Davidson. She was previously in a relationship with rapper Mac Miller.

**4.** Guest artists on Sweetener include Pharrell Williams, Nicki Minaj and Missy Elliott.

**5.** Ariana is known for being extra-nice to her fans, which was proven last month when she stopped a performance and **restarted it just so one fan could film it correctly**.





#### Thank You For Today Death Cab for Cutie

The ninth studio album from the postpop, post-alternative guitar slingers from Washington State lands this August. Since Transatlanticism launched them into the mainstream in 2003, they have never left, continuously touring and recording. In fact, since the album was announced in June, the band has been on the road touring the release, and will be until 2019.

#### FIVE FACTS:

**1.** The name Death Cab for Cutie comes from a song by the Bonzo Dog Doo-Dah Band.

**2.** This is the group's ninth studio album.

**3.** Only lead singer Ben Gibbard has been with the band for all nine albums.

**4.** The group won an MTV Video Music Award for "I Will Possess Your Heart".

**5.** Their fifth studio album, Plans, went platinum.













## BOX OFFICE TOP 20: 'CRAZY RICH ASIANS' SCORES AGAIN

It's official: "Crazy Rich Asians" is a box-office sensation.

The adaptation of Kevin Kwan's bestselling novel, starring Constance Wu and Henry Golding, brought in almost as many moviegoers in its second weekend as it did over opening weekend. The Warner Bros. release grossed \$24.8 million in ticket sales, according to final figures Monday, a tiny drop from its \$26.5 million debut the previous weekend.

Second-week drops are more commonly closer to 50 percent. Warner Bros. has said a sequel is already in development.

The weekend's new releases disappointed. STX Entertainment's critically slammed R-rated puppet caper "The Happytime Murders" debuted with a mere \$9.5 million, a career-low wide release for star Melissa McCarthy. The robot-dog fantasy "A.X.L.," from the beleaguered Global Road Entertainment, flopped with \$2.8 million. The top 20 movies at U.S. and Canadian theaters Friday through Sunday, followed by distribution studio, gross, number of theater locations, average receipts per location, total gross and number of weeks in release, as compiled Monday by comScore:

Crazy Rich Asians," Warner Bros.,
\$24,808,202, 3,526 locations,
\$7,036 average, \$76,617,149, 2 Weeks.

"The Meg," Warner Bros., \$12,812,615,
4,031 locations, \$3,179 average,
\$105,083,261, 3 Weeks.

"The Happytime Murders," STX Entertainment, \$9,532,425, 3,256 locations, \$2,928 average, \$9,532,425, 1 Week.

4 "Mission: Impossible - Fallout," Paramount, \$8,087,385, 3,052 locations, \$2,650 average, \$193,988,045, 5 Weeks.

"Mile 22," STX Entertainment, \$6,366,042, 3,520 locations, \$1,809 average, \$25,506,996, 2 Weeks.





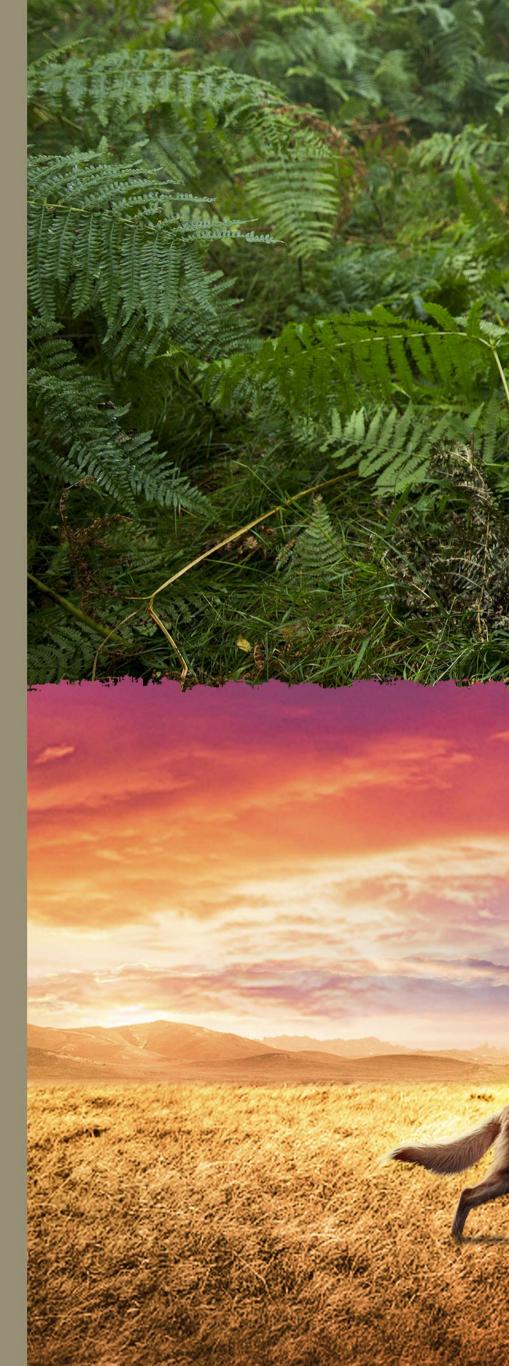
"Disney's Christopher Robin," Disney, \$6,261,783, 3,394 locations, \$1,845 average, \$77,550,566, 4 Weeks.

\*Alpha," Sony, \$6,002,359,
2,719 locations, \$2,208 average,
\$20,562,933, 2 Weeks.

BlacKkKlansman," Focus Features, \$5,098,405, 1,914 locations, \$2,664 average, \$31,791,945, 3 Weeks.

Slender Man," Sony, \$2,790,564,
2,065 locations, \$1,351 average,
\$25,408,680, 3 Weeks.

**10.** "A.X.L.," Open Road, \$2,782,017, 1,710 locations, \$1,627 average, \$2,782,017, 1 Week.





**11** "Hotel Transylvania 3: Summer Vacation," Sony, \$2,541,668, 1,802 locations, \$1,410 average, \$158,659,057, 7 Weeks.

**12.** "The Equalizer 2," Sony, \$2,032,245, 1,914 locations, \$1,062 average, \$98,052,577, 6 Weeks.

**13.** "Mamma Mia! Here We Go Again," Universal, \$2,000,880, 1,557 locations, \$1,285 average, \$115,355,990, 6 Weeks.

**14** "Ant-Man And The Wasp," Disney, \$1,791,836, 1,178 locations, \$1,521 average, \$211,458,535, 8 Weeks.

**15.** "Incredibles 2," Disney, \$1,642,506, 1,060 locations, \$1,550 average, \$597,055,472, 11 Weeks.









**16.** "Papillon," Bleecker Street, \$1,090,073, 544 locations, \$2,004 average, \$1,090,073, 1 Week.

**17.** "Spy Who Dumped Me, The," Lionsgate, \$1,010,334, 1,295 locations, \$780 average, \$32,288,476, 4 Weeks.

**18.** "2001: A Space Odyssey IMAX," Warner Bros., \$857,911, 319 locations, \$2,689 average, \$857,911, 1 Week.

**19.** "Jurassic World: Fallen Kingdom," Universal, \$741,610, 608 locations, \$1,220 average, \$413,010,305, 10 Weeks.

**20.** "Beautifully Broken," ArtAffects, \$582,152, 651 locations, \$894 average, \$582,152, 1 Week.

Universal and Focus are owned by NBC Universal, a unit of Comcast Corp.; Sony, Columbia, Sony Screen Gems and Sony Pictures Classics are units of Sony Corp.; Paramount is owned by Viacom Inc.; Disney, Pixar and Marvel are owned by The Walt Disney Co.; Miramax is owned by Filmyard Holdings LLC; 20th Century Fox and Fox Searchlight are owned by 21st Century Fox; Warner Bros. and New Line are units of Time Warner Inc.; MGM is owned by a group of former creditors including Highland Capital, Anchorage Advisors and Carl Icahn; Lionsgate is owned by Lions Gate Entertainment Corp.; IFC is owned by AMC Networks Inc.; Rogue is owned by Relativity Media LLC.



### COMPUTER-SCREEN THRILLER 'SEARCHING' TRANSCENDS ITS GIMMICK

If "Searching," a mystery about a father looking for his missing teenage daughter told only with smartphone and computer screens, sounds like a gimmick, don't worry, you're in good company. Its star, John Cho, and director and co-writer Aneesh Chaganty thought so too initially. It wasn't even a new concept. The producer for "Searching" was also behind the "screen thriller" "Unfriended," and wanted a follow-up that used the same technique.

But even with its inauspicious beginnings, the film has become a late summer must-see propelled by strong reviews from critics and a warm afterglow following the successful launch of "Crazy Rich Asians," which has only bolstered enthusiasm around "Searching" and its Asian-American leads. In its first weekend in limited release, actress Karen Gillan hosted a free screening of the film. "Crazy Rich Asians" director Jon M. Chu and star Henry Golding bought out a theater too. It made an impressive \$390,000 from nine theaters and distributor Screen Gems is hoping that momentum continues as it expands to 1,200 screens nationwide this weekend.

Chaganty laughs now about how he was more than willing to walk away from a chance to make his first feature just because he didn't buy into the ploy.

"I like good movies and I want to feel emotional and I don't want to give that up to do something just because there's an opportunity," Chaganty said. "It was a gimmick. I had seen the other films that took place on screens and I thought they were gimmicks."

But he and his co-writer and producing partner Sev Ohanian decided to think about it, and for two months raked their brains for a way in. Then one day, they hit gold. The film, they decided, would open with a montage showing a young family of three through the years told in digital photo albums, videos and calendar dates. It is a slice of life tearjerker that has been compared to the opening of "Up." And, perhaps most importantly, it makes you care about David Kim (Cho) and his daughter Margot (Michelle La).

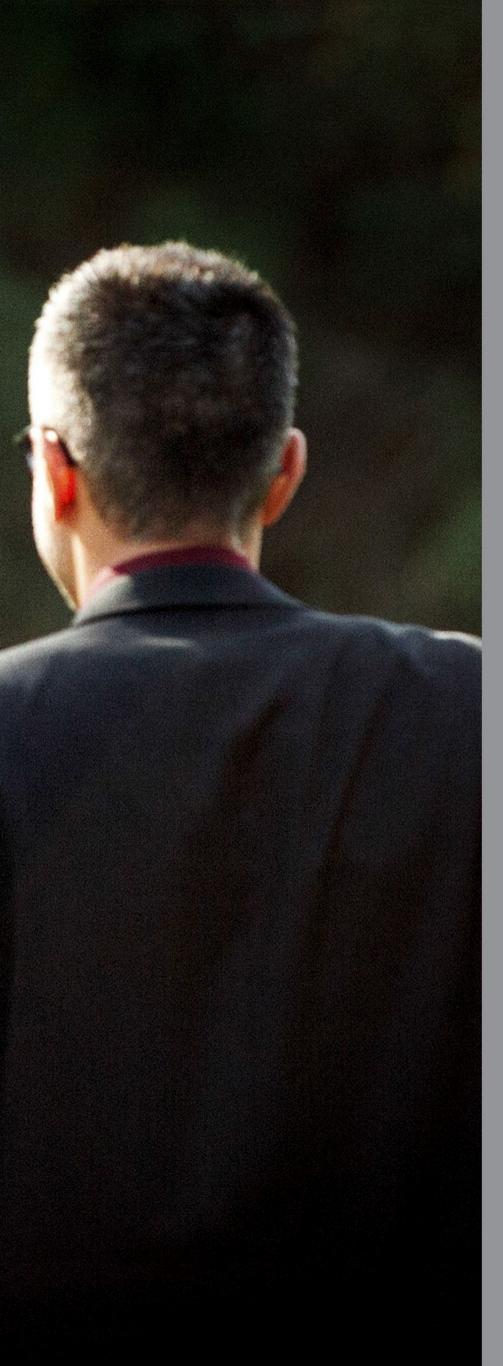
It's what got Cho on board too, who was put to the test in this role. For the most part, Cho had to act opposite only a blank computer screen and webcam.

"I don't know how I did it, I was bumbling my way through it really," Cho said. "It was weird, it was like acting in a black box ... Several times on









set I was like, 'Aneesh can we please stop this webcam business and let's shoot the third act with a bunch of cameras, real cameras and pop out of it? Can we please?"

According to Cho, Chaganty's response to this was, "John, shut up and act."

While the concept may have been frustrating to execute, however, the final product and story is so seamless it almost makes you forget that you're watching a story unfold through screens.

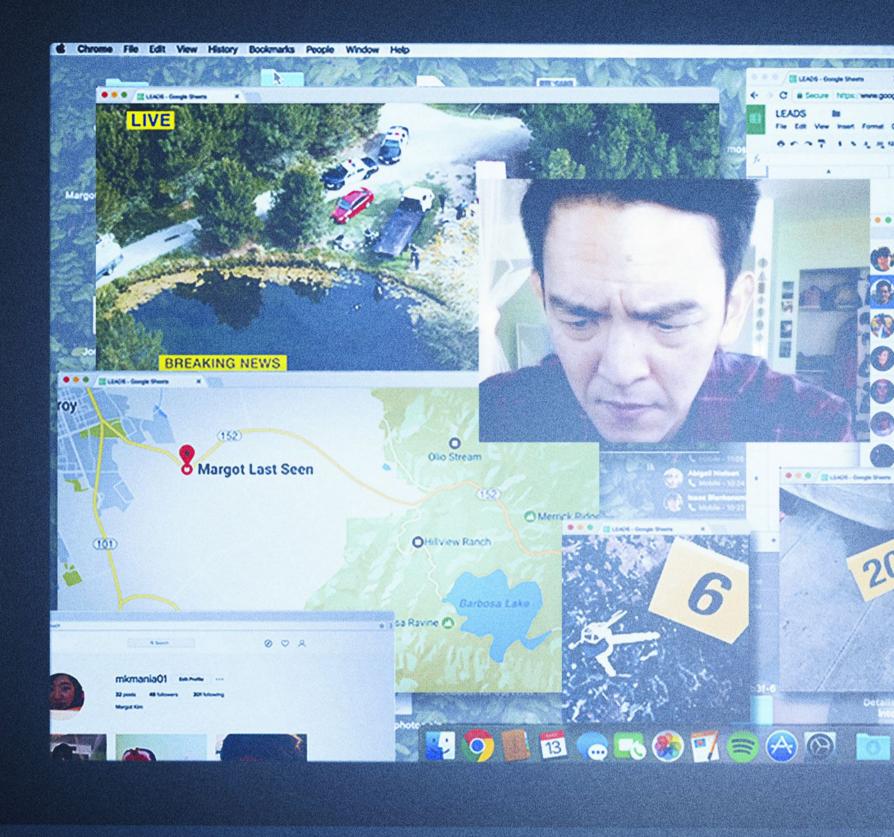
"After I saw the movie for the first time, I (told Aneesh), 'You have expanded the vocabulary of cinema, and that is so freaking hard to do," Cho said.

"Searching," Cho said, is a kind of bookend to "Crazy Rich Asians" and both are necessary for advancing representation in Hollywood movies.

"That's an Asian specific story and this one isn't," Cho said. "Those are two very important things to say. One is, 'We're going to tell our stories' and the other is, 'Don't limit what our stories are."

Chaganty simply wanted an Asian-American lead, and specifically Cho, because those are the families he grew up around in San Jose, California, where the film is set. Other than that, there is no story reason that necessitates that the lead be any ethnicity.

"I grew up watching movies that I loved that had nothing to do with race or culture or addressing skin color that just didn't have people like me in it. 'Mission: Impossible,' the 'Bourne' movies, the ones that don't have anything to do with that," Changanty said. "We've become part of the conversation because we're the first ones to do it in a thriller.



It's insane to me that this is even a conversation. I hope people look back on this and are like I don't get how this is racially progressive."

NAME

LAST SEEN

The film's opening and the enthusiasm around it has also made Cho start to reflect on progress. The 46-year-old Korean-American actor's name became its own social media movement in 2016 when a tech savvy man, William Yu, started photoshopping Cho into movie posters for Hollywood blockbusters like "Spectre" along with the hashtag #StarringJohnCho.

"I've been asked so much about it and it's kind of awkward. The common question is, 'Did it work?' And I'm like, 'I don't know!' In a way I was thinking it didn't work because they were like, 'Oh he's supposed to be Captain America' or something in these big tent-pole movies and while I really appreciated that sentiment, I'm not in any of these franchises. I've got my own, but I'm not in any of those," Cho said.

And yet, he also sees a silver lining. The two movies he's starred in since #StarringJohnCho, "Columbus" and "Searching" were directed by Asian-Americans and found their own grassroots success.

"It's an incredible story about what the people can will to be," Cho said.





## JOHN KRASINSKI TACKLES TERROR, CAREER SHIFT IN 'JACK RYAN'

John Krasinski comes across in conversation as a disarming match to his screen image, the sort of easy-going, decent guy he played on TV's "The Office" and in the romantic comedy "Away We Go."

Make that his former image. In a burst of creative versatility, he's fashioned himself into an acclaimed film director with "A Quiet Place" (in which he plays opposite wife Emily Blunt) and muscular heroes in the movie "13 Hours: The Secret Soldiers of Benghazi" and the new Amazon series "Tom Clancy's Jack Ryan," debuting Friday. In low-key style, Krasinski is proving that expectations are to be ignored. Who could have predicted that gangly, deskbound Jim of "The Office" would be hunting Middle Eastern terrorists as fledgling CIA analyst Ryan, or that the latest iteration of Clancy's big-canvas work would arrive — cinematically intact — on the small screen?

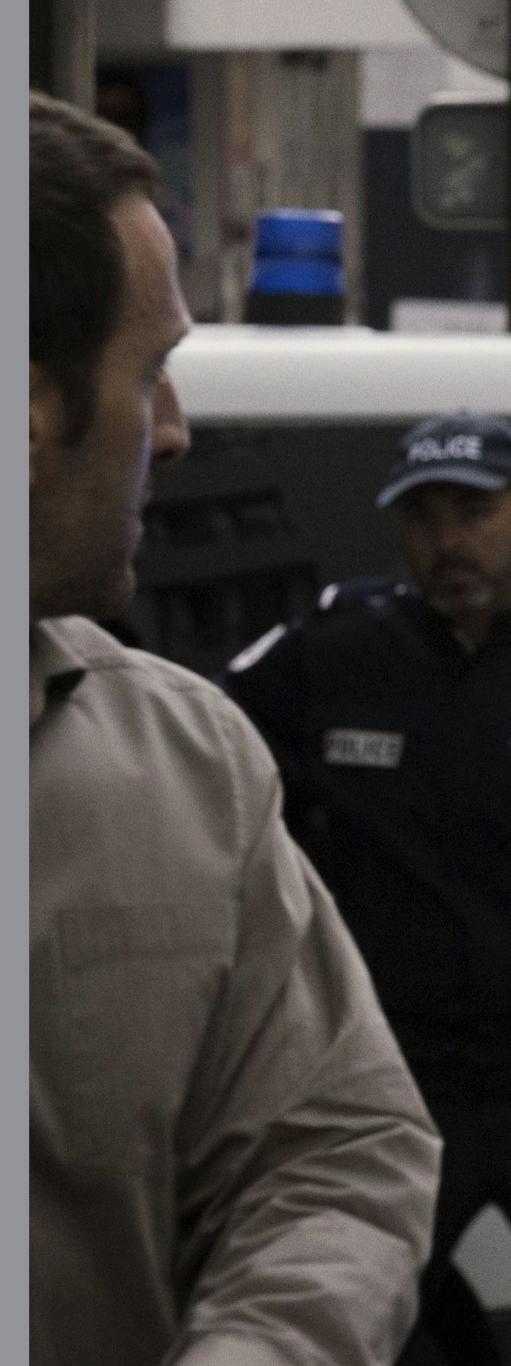
Such boundary-busting can be traced back to Krasinski's 2005-13 "Office" days, in the sitcom that he considered "the best thing out there, movie or television."

"I felt so proud to be a part of it, and so my definition of television and film was always blended. I never saw it as film or television, but rather just the best project going, the best character I can play," he said, something that's easier than ever to find on TV with the explosion of "really great shows."

The specific attraction of "Jack Ryan," his first series since "The Office," was both its form and content.

With the debut season's eight episodes (filming on season two is already underway), it's possible to reimagine and delve into the title role in ways not possible in a time-constrained movie, Krasinski said. And then there's the character himself, something of a childhood obsession for the actor.

"It may sound hokey, but I think that Jack Ryan was always one of those characters that you actually thought you could be one day. You can't grow up to be Superman or Spider-Man," he said. It was plausible to imagine becoming Ryan, a man who "used his brain and his instincts and was able to do extraordinary things."







Casting the part was critical, said series creators and executive producers Carlton Cuse ("Lost") and Graham Roland ("Mile 22").

"Carlton told me, 'We could write the best show either of us have ever written, but if don't have the right guy playing Jack Ryan the show is just not going to work," Roland recalled. A winning "everyman quality" needed for Ryan came across in Krasinski's work in "The Office," they said, but it was "13 Hours" that cinched the deal.

"We felt, wow, this is the guy who not only has (Ryan's) charm and intelligence ... but he also had the physicality to be an action hero," Roland said.

The Amazon series rolls the videotape back to Ryan's early days with the CIA in an original story by Cuse and Roland. Viewers meet him butting heads with new boss James Greer (Wendell Pierce), a vice admiral and topranking CIA official in the late Clancy's works but in career-rebuilding mode here.

"Jack Ryan" also stars Abbie Cornish as Cathy Mueller, Ryan's future wife but for now an epidemiologist who catches his eye at a party; Ali Suliman as Suleiman, a terrorist with a tragic family history, and Dina Shihabi as his wife, Hanin.

Whatever changes have been introduced don't clash with Ryan's steadfastness, said Roland, describing it at odds with the "age of the antihero" such as Claire Danes' troubled character in "Homeland."

"It felt really novel in a weird way to come back to a classic hero, a hero whose morality





is his strength," he said. It's not just Ryan who's the good guy: The CIA also wears a white hat, unlike other dramas depicting the agency as what Roland called a "cabal" filled with back-stabbers.

"We did an extensive amount of research, spent a lot of time with military people, with former and current members of the intelligence community, and we witnessed such a high level of professionalism," Cuse said. "We had a great appreciation for the role that these people play in keeping us safe and keeping the world safe and the importance of the United States as a beacon of democracy."

That said, the producers reject the possibility that the show might be seen as a rebuke to President Donald Trump's criticism of U.S. intelligence agencies and his public war of words with some former chiefs.

"Our intention was to entertain people and to give Clancy fans the portrayal of the military and the CIA that they remember from the books and from the early movies," Roland said.

Krasinski, a Massachusetts native whose extended family has a deep record of military service, salutes the approach. His said his research for the series gave him a newfound respect for the CIA and those in it.

"I remember somebody there saying, 'You know, politics come and go, but it's the soul of America that we're on the front line for," he said. "I'm certainly one of those people that grew up with incredible parents who reminded us to be very, very proud of the country that we're from."



## ROTTEN TOMATOES TAKES STEPS TO DIVERSIFY CRITICS POOL



Film review aggregator Rotten Tomatoes is attempting to diversify its film critic pool after a recent study found the site's reviews of topgrossing movies were heavily male-dominated.

The company says this week it's expanding criteria to be a "Tomatometer-approved critic" and giving \$100,000 to non-profit organizations to help offset the cost of attending film festivals.

The first \$25,000 is going toward sending critics to the Toronto International Film Festival in September.

An Annenberg Inclusion Initiative survey of Rotten Tomatoes-complied reviews for last year's top box-office hits found that nearly 80 percent of critics were male.

Rotten Tomatoes executives say the company is committed to advancing inclusion in criticism. The company will now look at an individual's body of work, including on new media platforms, instead of a critic's outlet or employer.

#### **ALMOST 80 PERCENT MALE**

Nearly 80 percent of film critics are male, according to a new study that analyzed the movie reviews to last year's top box-office hits.

The research was conducted by the University of Southern California's Annenberg Inclusion Initiative. Researchers studied the reviews of the 100 top-grossing films of 2017 that were posted on the aggregation website Rotten Tomatoes.

Of the 19,559 reviews studied, 77.8 were by male critics and 22.2 were by female critics. Stacy Smith, founder and director of the Inclusion Initiative, said film critics are "overwhelmingly white and male."

The lack of diverse critical perspectives, researchers said, contributes to the larger gender and ethnic biases in the film industry. The study counted 36 female-driven movies and 24 minority-led movies among the top 100 films of 2017, but found they were largely reviewed by white males.







Previous studies have charted the low numbers of female directors helming Hollywood's most popular productions. USC has found that 4 percent of all directors from the 1,100 top films from 2007 to 2017 were female. Researchers at San Diego State University found that women directed 11 percent of 2017's top 250 films, up from 7 percent the last year but the same percentage as in 2000.

"The very individuals who are attuned to the under- and misrepresentation of females on screen and behind the camera are often left out of the conversation and critiques," Smith said.

Female critics from minority groups accounted for just 4.1 percent of reviews studied.

Ì

7

4

8

5

2

0

9

6

3

+

fn

delete 🖾

Smith urged "the publicity, marketing and distribution teams in moviemaking" to increase access and opportunity to women of color critics.

Marc Choueiti, the study's lead author, also urged Rotten Tomatoes to re-examine its definition of a "top critic" (a designation given to some film critics) "or simply (cast) a wider net" to diversify voices.



## DECADES-OLD SKATEBOARDING TRICK MIXES WITH VIRTUAL REALITY

Leave it to Tony Hawk to mix a decades-old skateboarding trick with the latest in virtual reality technology.

The 50-year-old skateboarding pioneer and entrepreneur is dragging his 360-degree loop ramp out of storage and giving a handful of young skaters the chance to try to nail the near-impossible trick on a live virtual reality broadcast Sunday from his San Diego County headquarters.

There's no prize money or trophy for any skater who successfully completes The Loop, which Hawk first did 20 years ago.

"No, it's more sort of a badge of honor in the skate world," Hawk said.

Hawk will be rampside to provide commentary and coaching while Corbin Harris does play-byplay for Tony Hawk's Loop Challenge.

The only way to watch will be in virtual reality. Fans can download the free NextVR app from the stores associated with Oculus Go, PlayStation VR, HTC VIVE Pro, HTC VIVE, Windows Mixed Reality, Gear VR, and Google Daydream. A virtual reality headset is required.

This is the first foray into action sports for leading VR broadcast platform NextVR, based in Newport Beach. NextVR will place eight VR cameras along The Loop for the 3D stereoscopic broadcast. Fans will be fully immersed when they're placed at the drop-in and at the peak of the loop.

Hawk first became intrigued by the trick in the 1970s when he read a magazine article about a skater who tried — and failed — to ride a 360-degree loop.

Hawk said he knew it was possible and made several attempts to determine the perfect design. Hawk became the first skater to nail it in 1998 while filming a video in a bullring in neighboring Tijuana, Mexico.

Hawk said only about 15 skaters have successfully completed The Loop, which requires a perfect balance of momentum, speed and gravity.

Skating The Loop — which mirrors the look of a Hot Wheels loop — is similar to a Gravitron ride, with skaters gaining enough momentum to stick to the track. The drop-in is 14 feet tall and the complete track is 16 feet long. The height of the top of the ramp will have skaters going approximately 13 mph, the perfect speed to complete the challenge.

After his success in 1998, Hawk built a portable 360-degree ramp that he took on his Boom Boom Huckjam tour in 2003. He brings it out of storage every few years when enough people ask about it. NextVR approached him about a live event, "and up it went," Hawk said.



Image: Marta Pérez





"It's cool to me to bring all the new technology into play," Hawk said. "I don't set it up very much and there are not many freestanding loops that people can do."

Hawk was still completing the list of invited skaters. Among those expected to try The Loop are 11-year-old Gavin Bottger, who lives in nearby Oceanside, and Felipe Nunes of Brazil, who lost his legs at 6 and has been skating professionally with prosthetics. Also expected are Shawn Hale, Aaron "Jaws" Homoki, Chris Russel and Curren Caples.

None of the invited skaters has done The Loop. Hawk last rode The Loop 15 years ago on tour.

It can be dangerous, Hawk said, noting that he broke his pelvis attempting it years ago on a beat-up track. The setup will be filled with stunt pads "so people can start to get used to the timing and feel of doing it in its natural state. If you don't know what you're doing and you go at it without ever trying it and there are no pads in place, it can be very dangerous."

Some skaters were going to get a feel for the ramp Saturday while others were going to wait until the competition itself.

"Every time we've put it up I usually get my pads on and try to show the technique of doing it properly, doing it into the pads to get them motivated and teach them," Hawk said.

But he's not motivated to try the trick again.

"It's hard to explain it," Hawk said. "If you've done it, you've checked it off the list. I'm not going to get the same gratification. It's not like a trick you do and want to keep doing. And I have paid the price for it."



## PLANS ON MAKING UNTRACEABLE 3D GUNS CAN'T BE POSTED ONLINE

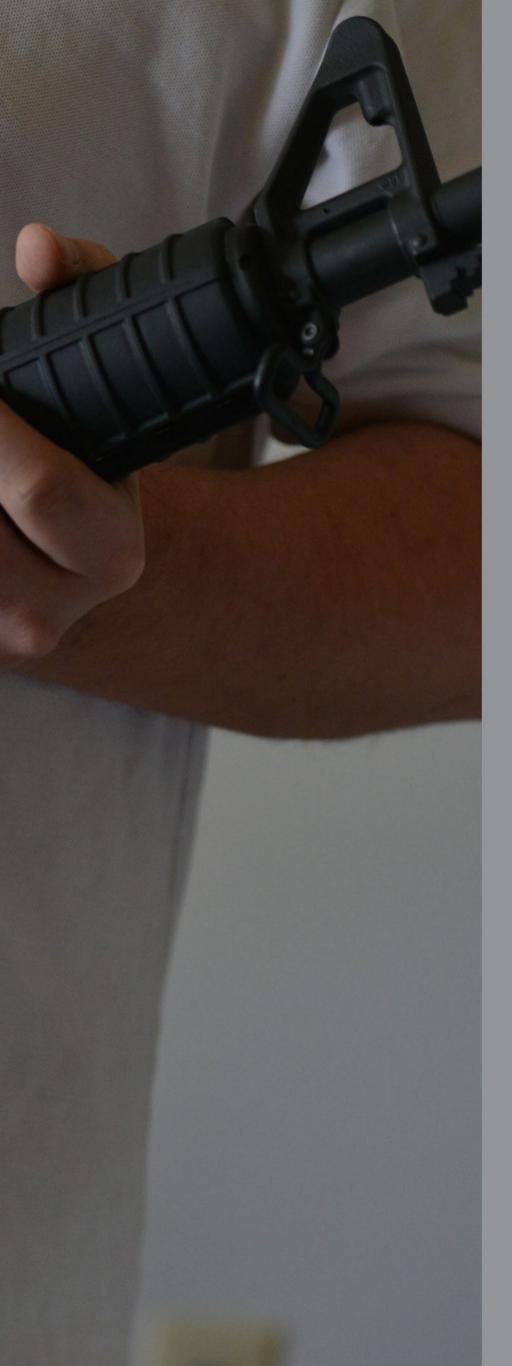
A U.S. judge in Seattle blocked the Trump administration this week from allowing a Texas company to post online plans for making untraceable 3D guns, agreeing with 19 states and the District of Columbia that such access to the plastic guns would pose a security risk.

The states sued to stop an agreement that the government had reached with Austin, Texasbased Defense Distributed, saying guidelines on how to print undetectable plastic guns could be acquired by felons or terrorists.

U.S. District Judge Robert Lasnik extended a temporary restraining order, and his new decision will last until the case is resolved. He said Cody Wilson, owner of Defense Distributed, wanted to post the plans online so that citizens can arm themselves without having to deal with licenses, serial numbers and registrations.

Wilson has said that "governments should live in fear of their citizenry."





"It is the untraceable and undetectable nature of these small firearms that poses a unique danger," Lasnik said. "Promising to detect the undetectable while at the same time removing a significant regulatory hurdle to the proliferation of these weapons — both domestically and internationally — rings hollow and in no way ameliorates, much less avoids, the harms that are likely to befall the states if an injunction is not issued."

The State Department had reached the settlement with the company after the agency removed the 3D gun-making plans from a list of weapons or technical data that cannot be exported overseas.

The states argued that the federal agency didn't follow the law when it removed 3D guns from the munitions list. They said the government was supposed to notify Congress and provide a 30-day window before making a change to that list, but it did not.

Lasnik criticized the government for switching its position on the threat posed by the 3D gunmaking plans.

Up until April, the government argued the distribution of the guidelines "posed a threat to world peace and the security and foreign policy of the United States," the judge said.

Despite those fears, the government decided that it only needed to restrict the international availability of firearms up to .50 caliber. That's when they reached a settlement with the 3D gun company.

There was no indication the government evaluated the unique characteristics of the plastic guns when it considered deleting that





category of weapons from the prohibited list, the judge said.

"Nor is there any reasoned explanation for its change in position," Lasnik said.

The federal government declined to comment on the judge's ruling.

A lawyer with the U.S. Justice Department had argued against the injunction, saying possessing 3D plastic guns is already against the law, and the federal government is committed to enforcing that law.

But the judge said it wasn't enough.

"While the court appreciates the earnestness with which this commitment was made at oral argument, it is of small comfort to know that, once an undetectable firearm has been used to kill a citizen of Delaware or Rhode Island or Vermont, the federal government will seek to prosecute a weapons charge in federal court while the state pursues a murder conviction in state court," Lasnik said.

Washington Attorney General Bob Ferguson praised the ruling.

"Once again, I'm glad we put a stop to this dangerous policy," Ferguson said. "But I have to ask a simple question: why is the Trump administration working so hard to allow these untraceable, undetectable 3D-printed guns to be available to domestic abusers, felons and terrorists?"

The Brady Campaign to Prevent Gun Violence, a pro-gun control group that has aggressively fought the online release of the gun plans, praised the judge's ruling "as a tremendous victory for the American public."



Avery Gardiner, co-president of the group, said 3D-printed guns "represent a supreme threat to our safety and security, and we are grateful that Judge Lasnik recognized it as such."

The states suing are Washington, Connecticut, Maryland, New Jersey, New York, Oregon, California, Colorado, Delaware, Hawaii, Illinois, Iowa, Minnesota, North Carolina, Rhode Island, Vermont, Virginia, Massachusetts, Pennsylvania and the District of Columbia.

## UNIVERSITY OF NEW A HEALTH SCIENCES CEN

### UNIVERSITY OF NEW MEXICO ADDS \$3B IN ECONOMIC OUTPUT

Research shows the University of New Mexico is responsible for nearly 25,000 jobs, \$3.5 billion in annual employee compensation and another \$3 billion in economic output.

A study released this week looked at operations, student expenditures, alumni productivity and technology transfer during the past fiscal year. University officials say the study marked the first of its kind to quantify the economic contributions of the entire university system.

The system is made up of the Albuquerque main campus and Health Sciences Center along with branch campuses in Taos, Valencia County, Los Alamos and Gallup.

The report was commissioned by STC.UNM, the university's technology-transfer and economic-development organization.

**AEXICO** 

TER

University President Garnett Stokes says learning and discovery missions that are central to universities like UNM are also interconnected to the mission of driving economic and social prosperity.

## WEST VIRGINIA STATE UNIVERSITY HONORS NASA MATHEMATICIAN

West Virginia State University has honored NASA mathematician Katherine Johnson with a bronze statue and scholarship dedication on the eve of her 100th birthday.

Six of Johnson's grandchildren revealed the statue during a ceremony Saturday on the West Virginia State campus in Institute.

The university also awarded a scholarship in Johnson's name to two students majoring in science, technology, engineering and math.

Johnson turned 100 on Sunday (26). She graduated from the school in 1937 at age 18 with bachelor's degrees in mathematics and French.

Johnson and three other women crunched numbers at the NASA Langley Research Center in Hampton, Virginia. They worked in the precomputer age, calculating rocket trajectories and orbits for the earliest American space flights.

Johnson was featured in the book and 2016 film "Hidden Figures."







AND AND AND



#### PLUTO EXPLORER SPOTS NEXT DESTINATION BILLION MILES BEYOND

A NASA spacecraft that explored Pluto has spotted its next target on the outskirts of our solar system.

NASA this week revealed pictures taken by New Horizons earlier this month of a tiny icy world known as Ultima Thule (THOO-lee). New Horizons is aiming for a flyby on New Year's Day. It will be humanity's most distant exploration of a celestial body, 4 billion miles (6.4 billion kilometers) from Earth and 1 billion miles (1.6 billion kilometers) beyond Pluto.

New Horizons in 2015 became the first spacecraft to visit Pluto. Ultima Thule is minuscule by comparison, an estimated 20 miles (30 kilometers) across. Scientists were surprised New Horizons could detect it from 100 million miles (155 million kilometers) out.

The pictures are the farthest ever taken, with more to come.





#### MEMORY CHIP MAKER MICRON ANNOUNCES \$3B EXPANSION IN MANASSAS

One of the world's largest semiconductor companies is making a \$3 billion investment in northern Virginia to expand its manufacturing facility and add 1,100 jobs.

Virginia Gov. Ralph Northam said Wednesday that the decision by Boise, Idaho-based Micron Technology to expand its Manassas facility is "one of the largest manufacturing investments in the history of this commonwealth" at a groundbreaking ceremony Wednesday.

Micron decided to expand its existing facility in Manassas after considering offers from competing domestic and international locations, including Singapore. Micron CEO Sanjay Mehrotra said the success of the existing facility as well as the economic incentives offered by the state and the city of Manassas helped tip the scales in Virginia's favor. Micron's decision comes as northern Virginia continues to court tech giant Amazon as it seeks a location for a \$5 billion second headquarters that could employ as many as 50,000.

Stephen Moret, CEO of the state's economic development authority, said winning the battle for Micron provides the state a measure of momentum as it competes with 19 other jurisdictions for Amazon, though he also cautioned against reading too much into how any specific factor might be weighed by Amazon.

"Any time a top-flight company goes through a competitive site selection process .... to win that competition is a major signal to corporate America and executives around the world," Moret said.

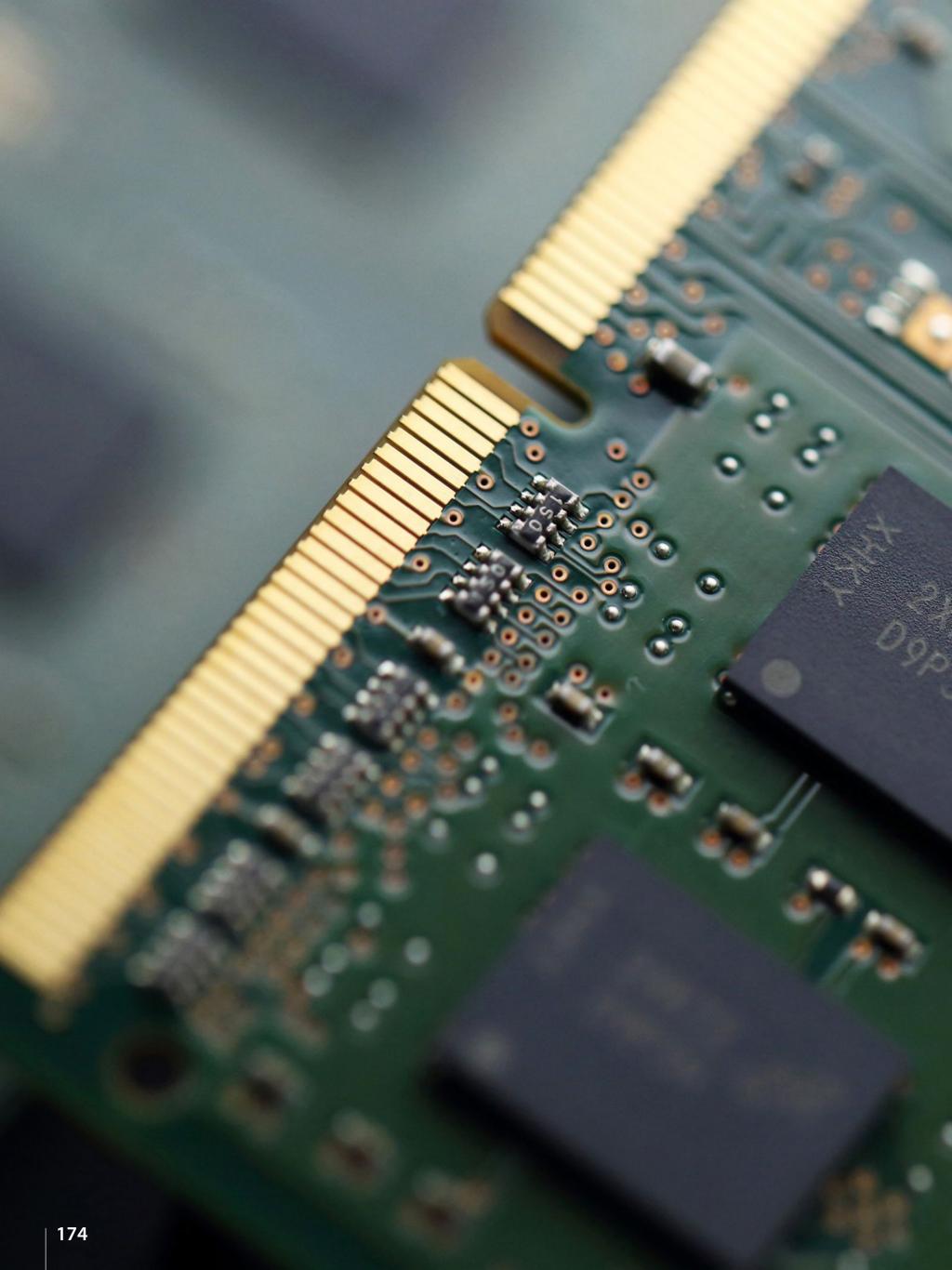
The incentives include a planned \$70 million grant from the state, and a series of tax breaks offered by Manassas, a city about 40 miles west of the nation's capital that was eager to keep the company that serves as its largest employer and taxpayer.

The \$70 million in state funds will require approval from the General Assembly. Moret said the grant is too large for the administration to fund it out of the discretionary funds available to the governor through the Commonwealth Opportunity Fund.

While 1,100 jobs is a significant number, the \$3 billion investment by Micron is what elevates it as one of the Virginia's economic development deals. Micron's plans include an expansion of its high-tech "clean room" for manufacture of semiconductors and memory storage units that primarily will be used in automotive and industrial contexts.







Moret said the \$3 billion figure demonstrates the level of long commitment Micron is making to northern Virginia.

About 1,200 people currently work at the Manassas plant. Mehrotra said the plant employs a combination of engineers with four-year degrees and technicians who have a scientific bent but whose post-secondary education comes through community colleges.





#### HACKER OF CELEBRITY PHOTOS GETS 8 MONTHS IN PRISON

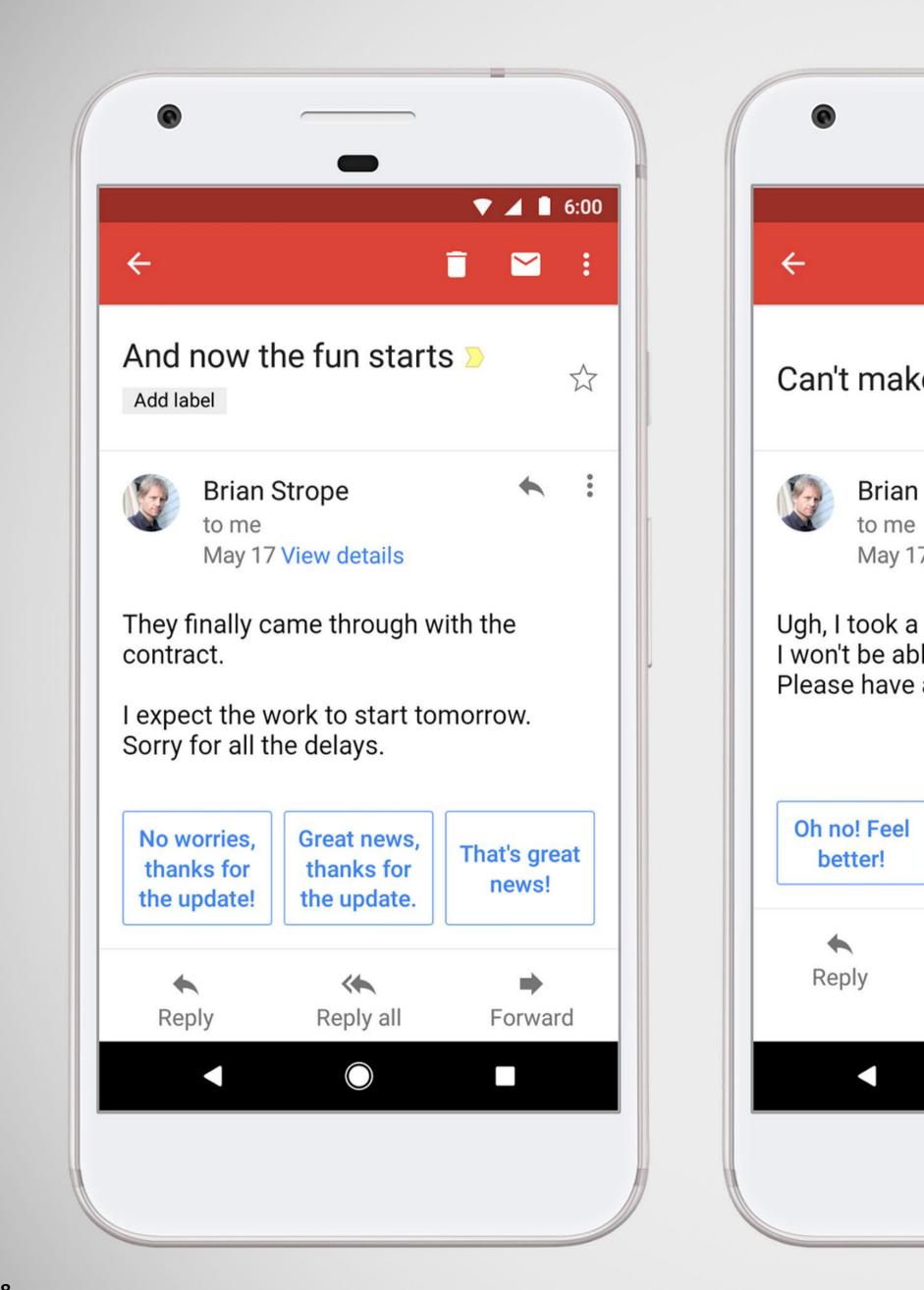
A Connecticut man who hacked into more than 200 iCloud accounts of Hollywood stars and other people has been sentenced to eight months in prison.

George Garofano was sentenced Wednesday in federal court in Bridgeport. After prison, he must serve three years of supervised release and perform 60 hours of community service.

The North Branford man was one of four men arrested in the 2014 hacking scandal that led to private photos of Jennifer Lawrence, Kirsten Dunst, Kate Upton and others being made public.

Authorities say the hackers used a phishing scheme that sent emails appearing to be from Apple security accounts that asked for usernames and passwords.

Garofano pleaded guilty in April and asked for leniency, saying he faces a lifetime loss of rights because of the felony conviction.



# 6:00 e it > Add label $\mathfrak{T}$ Strope View details turn for the worst last night. e to make it to the party. a great time without me. Sorry to We will miss you! hear that. Reply all Forward $\bigcirc$

#### USEFUL OR CREEPY? MACHINES SUGGEST GMAIL REPLIES

Google is toeing the line between helping you save time and creeping you out as it turns to machines to suggest email replies on your behalf.

The customized auto-responses come in the latest version of Gmail on the web and expand on a feature already available on Android devices and iPhones. They're just one more example of how artificial intelligence is seeping into everyday online life, whether it's to tailor product recommendations or correct spelling.

So far the new feature has been drawing mixed responses from users.

The new feature, called Smart Reply, offers three short responses, like "It was great seeing you too," or "I'll look into it." Unlike standard autoreplies when on vacation, for instance, these are customized to an individual email based on its context. If you select one, you can either send it immediately or edit it before sending.

The responses are automatically created using Google's artificial intelligence systems. Humans aren't reading people's emails, but machines





are scanning them. Although Google stopped scanning email to target advertising in 2017, it still scans them to filter out junk mail, identify phishing scams and, now, to create suggested replies. (Yahoo and AOL, both owned by Verizon, still scan email for advertising.)

Google's suggestions draw on what's in your email, such as the text of the message and the subject line. The analysis can include past conversations. For example, if someone says "Thanks!" more often than "Thanks," with no exclamation point, the suggested response would likely reflect that.

It's not known, though, how far Google goes in scanning your email. For instance, Gmail scans attachments for security risks, but is it also using that information to customize responses? The machines behind Google Photos can tell whether an image has food, flowers or the beach. Might Gmail suggest, "How was lunch?" Google didn't respond to a query for details on what it scans for replies.

Brian Lam, a San Diego attorney who focuses on privacy and data security, said auto-replies represent "a tradeoff between privacy and new features that consumers may want."

Google has been scanning Gmail since its debut in 2004, so scanning for auto-replies shouldn't come as a surprise. Lam said he has no concerns as long as companies disclose they are doing this.

"There's a market incentive to behave responsibly," he said. There's been consumer backlash when people get wind of companies that don't respect privacy. People decide not to use those services." Not every email will get suggestions — only those that Google thinks will lend themselves to a short reply.

Graham Gardner, a freelance photographer and leather-goods maker in Minneapolis, said he has used smart replies in Gmail several times over the past few months. He said the speed of response can be helpful, particularly if he is on his phone and can reply with one tap.

"It can help with quick replies that don't need too much elaboration, so you can have peace of mind quickly and sort out more specific information in a full reply later," he said.

But Maya Castro, an assignment editor for a TV station in San Francisco, said she sticks to her own voice when emailing, even though she's OK with auto-responses for text messages and Facebook chats.

"It boils down to tone and mood," she said. "Smartor auto-responses show a lack of thought."

To disable the "Smart Reply" feature on a mobile device, simply go to "Settings" and uncheck the box next to "Smart Reply." But for now, there's no way to disable the feature on the web. However, users can return to the "classic" version of Gmail on the web by selecting that option under "Settings."

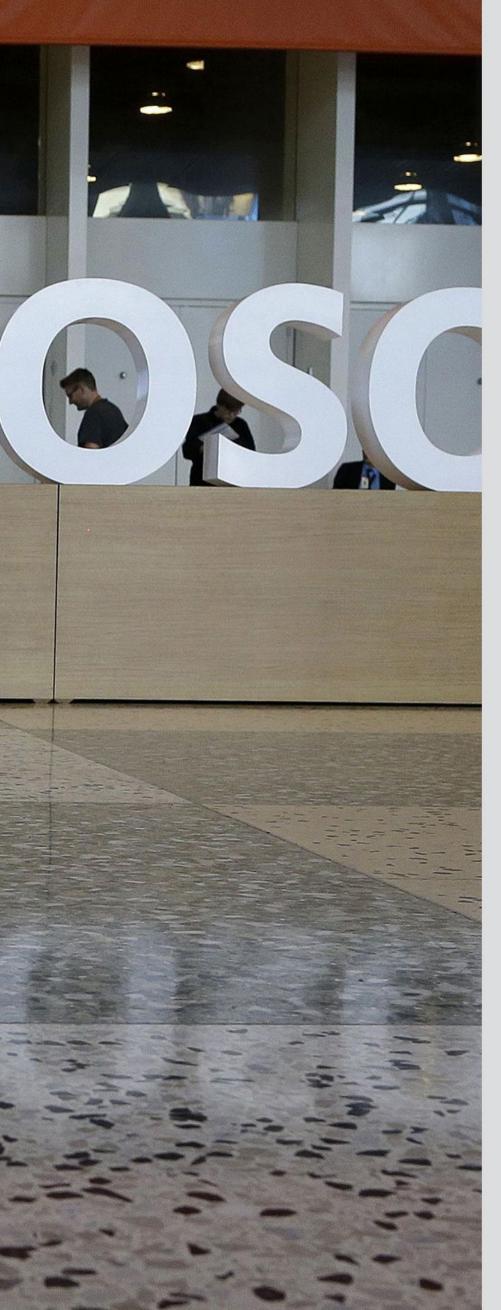
Suggesting responses isn't the only way Google uses artificial intelligence to help people manage their emails, as it has been rolling out a new version of Gmail since April. The new Gmail has "Nudges," a feature that reminds users to reply to emails it deems important. Gmail also prods users who forget to include an attachment to an email that uses the word "attached" or something similar.







# i uleis iliside



## MICROSOFT TO CONTRACTORS: GIVE NEW PARENTS PAID LEAVE

Microsoft will begin requiring its contractors to offer their U.S. employees paid leave to care for a new child.

It's common for tech firms to offer generous family leave benefits for their own software engineers and other full-time staff, but paid leave advocates say it's still rare to require similar benefits for contracted workers such as janitors, landscapers, cafeteria crews and software consultants.

"Given its size and its reach, this is a unique and hopefully trailblazing offering," said Vicki Shabo, vice president at the National Partnership for Women and Families. The new policy affects businesses with at least 50 U.S.-based employees that do substantial work with Microsoft that involves access to its buildings or its computing network. It doesn't affect suppliers of goods. Contractors would have to offer at least 12 weeks of leave to those working with the Redmond, Washingtonbased software giant; the policy wouldn't affect the contractors' arrangements with other companies. Leave-takers would get 66 percent of regular pay, up to \$1,000 weekly.

The policy announced Thursday rolls out over the next year as the company amends its contracts with those vendors. That may mean some of Microsoft's costs will rise to cover the new benefits, said Dev Stahlkopf, the company's corporate vice president and general counsel.

"That's just fine and we think it's well worth the price," she said.

Microsoft doesn't disclose how many contracted workers it uses, but it's in the thousands.

The new policy expands on Microsoft's 2015 policy requiring contractors to offer paid sick days and vacation.

Other companies such as Facebook have also committed to improve contractor benefits amid unionization efforts by shuttle drivers, security guards and other contract workers trying to get by in expensive, tech-fueled regions such as the San Francisco Bay Area and around Washington's Puget Sound.

Facebook doesn't guarantee that contract workers receive paid parental leave, but provides a \$4,000 new child benefit for new parents who don't get leave. A much smaller California tech





company, SurveyMonkey, announced a paid family leave plan for its contract workers earlier this year.

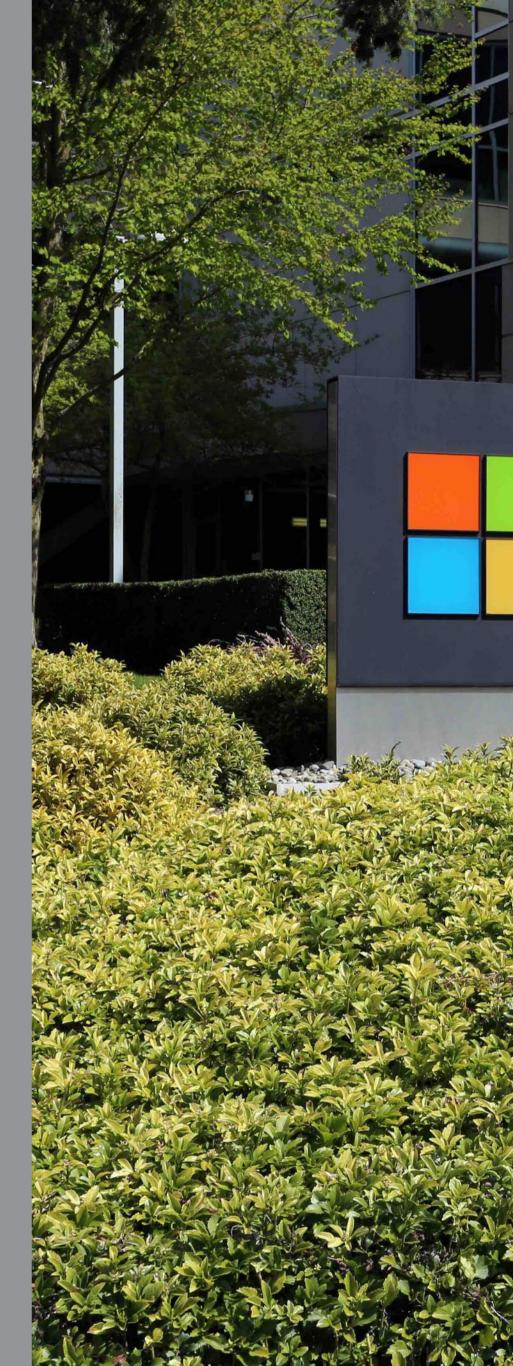
Microsoft said its new policy is partially inspired by a Washington state law taking effect in 2020 guaranteeing eligible workers 12 weeks paid time off for the birth or adoption of a child. The state policy, signed into law last year, follows California and a handful of other states in allowing new parents to tap into a fund that all workers pay into. Washington will also require employers to help foot the bill.

A federal paid parental leave plan proposed by President Donald Trump's daughter, Ivanka Trump, could rely on a similar model but has gained little traction.

"Compared to what employers are doing, the government is way behind the private sector," said Isabel Sawhill, a fellow at the Brookings Institution who has urged the White House and Congress to adopt a national policy.

Sawhill said it is "very unusual and very notable" that Microsoft is extending family leave benefits to its contract workers. Microsoft already offers more generous family leave benefits to its own employees, including up to 20 weeks fully paid leave for a birth mother.

Microsoft's push to spread its employee benefits to a broader workforce "sends a message that something has to happen more systematically at the federal level," said Ariane Hegewisch, a program director for employment and earnings at the Institute for Women's Policy Research. Until then, she said, it's helpful that Microsoft seems willing to pay contracting firms more to guarantee their workers' better benefits.



# Microsoft



"Paid family leave is expensive and they acknowledge that," Hegewisch said. Otherwise, she said, contractors with many employees of child-bearing age could find themselves at a competitive disadvantage to those with older workforces.

Republican state Sen. Joe Fain, the prime sponsor of the measure that passed last year, said Microsoft's decision was "a really powerful step forward."

By applying the plan to contractors and vendors around the country, "it really creates a pressure for those state legislatures to make a similar decision that Washington made."





## FOXCONN GIVING \$100 MILLION TO UVV-MADISON FOR PARTNERSHIP

Foxconn Technology Group announced this week that it will invest \$100 million in engineering and innovation research at the University of Wisconsin-Madison, making it one of the largest gifts in the school's history that comes as the Taiwan-based electronics giant builds a factory in southeastern Wisconsin that would be the company's first of its kind in North America.

Foxconn CEO Terry Gou and UW-Madison Chancellor Rebecca Blank signed an agreement that also calls for the creation of a science and technology institute on the UW-Madison campus that will collaborate closely with the display screen manufacturing plant, which is being built in Mount Pleasant, about 100 miles (160 kilometers) southeast of Madison near the Illinois border. Foxconn, the world's leading electronics manufacturer, chose Wisconsin for its first plant outside of Asia after receiving generous incentives from the state. Foxconn says the manufacturing campus could cost up to \$10 billion and eventually employ 13,000 people.

Finding those workers was expected to be a challenge in a state with low unemployment. The deal announced this week would provide a conduit of potential interns and employees from the state's largest university to the Foxconn plant.

"We're going to be a long-term community member in the state of Wisconsin," said Foxconn executive Louis Woo. "We see ourselves as an enabler of talent, that's creation of jobs. We also see us as an enabler of technology."

The Foxconn Institute for Research in Science and Technology, to be created under the agreements, will be a hub for technological innovation and provide an environment for research and development initiatives in medical science, materials science, computer and datadriven science.

The institute's main location will be at the Foxconn manufacturing campus in Racine County, but it will also have a presence in Madison.

The university said the agreements formalize its commitment to being a part of research with Foxconn, while Foxconn will assist with research, recruiting and creating job opportunities.

To receive the \$100 million from Foxconn, the university will have to raise an equal amount over the next two years as part of a sub-campaign of its \$3.2 billion All Ways Forward fundraising effort.



## 

.m

BUSCOUSY

Foxconn

#### words that public research attacned, appendix process a study depending backet and the conversion of the formers to evalue the development of states ( ) process a study depending mode development attacned ( ) processes. We accesse

The instruction of column or decourse grands and evolution is an existing of a summary grand access decourses) located a final manage, the compact between one another than the manage and the decourse of column region shared or each the summary and an exception between the evolution of the decourse of the decourse region shared or each the summary and evolution of the decourse are unservation. Between the evolution of the decourse between the evolution of the decourse the origin of the decourse the decourse of the decourse of the decourse of the decourse of the origin of the decourse the decourse of the origin of the decourse the decourse of the d

The second secon

#### It gotting the implementation

Anard Systematic faceof decail
 Anard Systematic faceof decail
 By Anard Systematic faceof decail
 By Anard Systematic faceof decail
 By Anard Systematic faceof decail
 Restarting and the anardy of managed degreements in the instructions gains the addressing of Anard
 How Anardow Systematic faceof decails
 Restarting and the anard Anardow Systematic faceof decails
 A Market Constraints of Marketing Balanceil addressing and Instruments
 A Market Constraints of Marketing Balanceil (Marketing and Constraints
 A Market Constraints of Marketing Balanceil (Marketing and Constraints
 For addressing Marketing Balanceil (Marketing and Constraints
 For addressing Marketing Balanceil (Marketing Marketing
 For addressing Marketing
 For addressing Marketing
 For addressing Marketing
 For addressing Marketing
 For addressing
 For

and the align them to advance they studies and a stress

The bulk of Foxconn's \$100 million, which Blank said was the largest industry research partnership in university history, will go toward constructing a new building on the engineering campus.

"I'm excited," Blank said. "You don't get \$100 million gifts very often."

Foxconn has also announced plans to open its North American office headquarters in Milwaukee and technology centers that could employ hundreds in Eau Claire and Green Bay. Gov. Scott Walker has praised those investments outside of Racine County, where the 22 million-square-foot manufacturing campus is being built, saying it shows the positive statewide economic impact of the project.

State and local government incentives for the main Foxconn project in Racine County could top \$4 billion, mostly in cash payments from the state. That price tag, the largest in U.S. history for a foreign corporation, has drawn criticism from Democratic opponents of Walker, who negotiated the deal. Walker faces Democrat Tony Evers, who has vowed to renegotiate the deal, in the November election.

Wisconsin voters appear torn on the value of the Foxconn project. In a Marquette University Law School poll last week, 44 percent of registered voters said the state is paying more than the plant is worth. A majority, 61 percent, said they felt the plant would substantially improve the Milwaukee-area economy, but an equal percentage said businesses where they live will not directly benefit.







# CALIFORNIA SEEKS TO BE FIRST STATE TO LIMIT PLASTIC STRAVVS

If you want a straw with your drink, you soon may have to ask for it at California restaurants.

Lawmakers on Thursday sent Gov. Jerry Brown a measure that supporters say would make California the first state to bar full-service restaurants from giving out single-use plastic straws unless customers request them. It wouldn't ban straws as some cities have in a bid to combat waste.

San Francisco and Seattle passed plastic straw bans earlier this year, drawing ire from conservatives who see the restrictions as government overreach and liberals who say outlawing straws hurts disabled people.

The California measure, which passed the Assembly 45-20, is part of a larger trend in cities across the United States that are banning plastic bags, plastic utensils and other plastic goods to reduce ocean pollution. Democratic California Assemblyman Ian Calderon described his measure, AB1884, as a small step toward reducing plastic use and fighting pollution. It would apply only to fullservice restaurants, not fast food establishments.

Republican Assemblywoman Melissa Melendez said she doesn't believe the measure would effectively curb ocean pollution and would unfairly punish restaurants.

Restaurants would be warned for first and second violations and fined \$25 per day for subsequent infractions, with an annual fine limit of \$300.

Calderon says the measure would not be overly burdensome on businesses. The restaurant industry didn't oppose it.

# EXPERTS ASSEMBLE FOR UN-HOSTED MEETING ON 'KILLER ROBOTS'

Experts from scores of countries are meeting to discuss ways to define and deal with "killer robots" — futuristic weapons systems that could conduct war without human intervention.

The weeklong gathering that opened Monday is the second at U.N. offices in Geneva this year to focus on such lethal autonomous weapons systems and to explore possibilities for regulating them, among other issues.





In theory, fully autonomous, computercontrolled weapons don't exist yet, U.N. officials say. The debate is still in its infancy, and the experts have at times grappled with basic definitions. The United States has argued that it's premature to establish a definition of such systems, much less regulate them.

Some top advocacy groups say governments and militaries should be prevented from developing such systems, which have sparked fears and led some critics to envisage harrowing scenarios about their use.

As the meeting got underway, Amnesty International urged countries to work toward a ban.

Killer robots are "no longer the stuff of science fiction," Rasha Abdul Rahim, an artificial intelligence researcher for the human rights organization, said. Rahim warned that technological advances are outpacing international law.

Part of the trouble for activists, however, is that the U.N.-backed conference that convened the meeting works by consensus. A single participating country — like a big military power — therefore could scuttle efforts to reach an international ban.

Amandeep Gill, who is chairing the meeting and a former Indian ambassador to the U.N.backed Conference on Disarmament, said progress is being made. He summarized three general camps of countries: One seeks a formal, legal ban on such weapons; another wants a political, but non-binding agreement; and a third wants no changes at all.





"We are coming closer to an agreement on what should be the guiding principles — guiding the behavior of states and guiding the development and deployment of such systems around the world," Gill told reporters Monday. "And this is not an insignificant outcome."

At a news conference hosted by the Campaign to Stop Killer Robots, Nobel Peace Prize laureate Jody Williams said the group wanted "meaningful human control" when it comes to the use of military weapons and negotiations toward a ban on computer-controlled weapons systems.

"There is a lot of movement within the governments: We're up to 26 now that have called for a ban," said Williams, who won the 1997 Nobel for her work against land mines. "Logic would dictate — at least in my thinking — that there would be a mandate toward negotiating a binding instrument, and that's what we're pushing for here this week."

 $\odot$ 

# CAMPA KILLE

0



3

0

# IGN TO STOP RROBOTS

A CARLON AND



# FARM IN SOUTH KOREAN ROAD TUNNEL NO ROSE-COLORED PIPE DREAM

Behind a blue wall that seals a former highway tunnel stretches a massive indoor farm bathed in rose-tinted light.

Fruits and vegetables grow hydroponically — with no soil — in vertically stacked layers inside, illuminated by neon-pink LEDs instead of sunlight.

Operators of this high-tech facility in South Korea say it is the world's first indoor vertical farm built in a tunnel. It's also the largest such farm in the country and one of the biggest in the world, with a floor area of 2,300 square meters (25,000 square feet), nearly half the size of an American football field.

Indoor vertical farming is seen as a potential solution to the havoc wreaked on crops by the extreme weather linked to climate change and to shortages of land and workers in countries with aging populations.

The tunnel, about 190 kilometers (120 miles) south of Seoul, was built in 1970 for one of South Korea's first major highways. Once a





symbol of the country's industrialization, it closed in 2002. An indoor farming company rented the tunnel from the government last year and transformed it into a "smart farm."

Instead of the chirrups of cicadas, Claude Debussy's "Clair de Lune" resonates in the tunnel in hopes of stimulating the crops' healthy growth.

"We are playing classical music because vegetables also love listening to music like we do," said Choi Jae Bin, head of NextOn, the company that runs the vertical farm.

Sixty types of fruits and vegetables grow in optimized conditions using NextOn's own growth and harvest systems. Among them, 42 are certified as no-pesticide, no-herbicide and non-GMO products, said Dave Suh, NextOn's chief technology officer.

He said the tunnel provides temperatures of 10 to 22 degrees Celsius (50 to 72 Fahrenheit), enabling the company to optimize growing conditions.

High-tech smart farms, used also in places like Dubai and Israel where growing conditions are challenging, can be a key to developing sustainable agriculture, experts said.

"Society is aging and urbanization is intensifying as our agricultural workforce is shrinking," said Son Jung Eek, a professor of plant science at Seoul National University. Smart farming can help address that challenge, he said, as well as make it easier to raise high-value crops that are sensitive to temperature and other conditions.

Only slightly more than 16 percent of South Korea's land was devoted to farming in 2016,





according to government statistics. The rural population has fallen by almost half over the past four decades, even as the overall population has grown nearly 40 percent.

The Agriculture Ministry announced earlier this year that it will invest in smart farm development nationwide, expanding their total area to 7,000 hectares (17,000 acres) from the current 4,010 hectares (9,900 acres).

Turning a profit can be challenging for indoor vertical farms given the high cost of construction and infrastructure. NextOn cut construction costs in half by using the abandoned tunnel and developing its own LED lights and other technologies.

The proprietary technologies reduce water and energy use and the need for workers, cutting operation costs, Suh said. Sensors in each vertical layer measure variables such as temperature, humidity, light, carbon dioxide and micro-dust levels to maintain an optimized environment for each crop.

The crops will cost less than conventionally grown organic vegetables, Suh said.

The farm will begin supplying vegetables to a major food retailer and a leading bakery chain beginning in late August, NextOn said.

Next up: more tiers of crops in the remaining two-thirds of the tunnel to grow high-value fruits and medicinal herbs.

Suh said the medicinal plant market is currently dominated by a few countries and regions.

"Our goal is to achieve disruptive innovation of this market by realizing stable mass production of such premium crops," he said.





# RIGHTS GROUPS TO GOOGLE: NO CENSORED SEARCH IN CHINA

More than a dozen human rights groups are urging Google not to offer censored internet search in China, amid reports it is planning to again provide the service in the giant market.

A joint letter calls on CEO Sundar Pichai to explain what Google is doing to safeguard users from the Chinese government's censorship and surveillance.

It describes the company's secretive plan to build a search engine that would comply with Chinese censorship as representing "an alarming capitulation by Google on human rights."

"The Chinese government extensively violates the rights to freedom of expression and privacy; by accommodating the Chinese authorities' repression of dissent, Google would be actively participating in those violations for millions of internet users in China," the letter says.

In a statement, Google said it has "been investing for many years to help Chinese users,





from developing Android, through mobile apps such as Google Translate and Files Go, and our developer tools. But our work on search has been exploratory, and we are not close to launching a search product in China."

In the U.S., President Donald Trump and other conservatives have lobbed charges of censorship at Google and other U.S. tech companies, though they haven't provided evidence. Trump claimed that Google had rigged search results about him "so that almost all stories & news is BAD." A top adviser said the White House is "taking a look" at whether Google should face federal regulation. The companies deny the accusations.

Meanwhile, Apple announced plans last year to open a data center in mainland China with ties to the country's government, raising concerns about the security of iCloud accounts that store personal information from Apple customers who live in mainland China, even when they're traveling outside the country. Other major technology companies, including Amazon, Microsoft, and IBM, already had similar deals to run data centers in mainland China to remain in the good graces of the country's Communist government.

The rights groups' expression of concern over a Chinese search engine from Google follows a letter earlier this month from more than a thousand Google employees protesting the China plans. The letter called on executives to review ethics and transparency at the company.

Google had previously complied with censorship controls starting in 2006 as it sought a toehold in the booming Chinese economy. But it exited the Chinese search market in 2010 under unrelenting pressure from human rights groups and some shareholders.

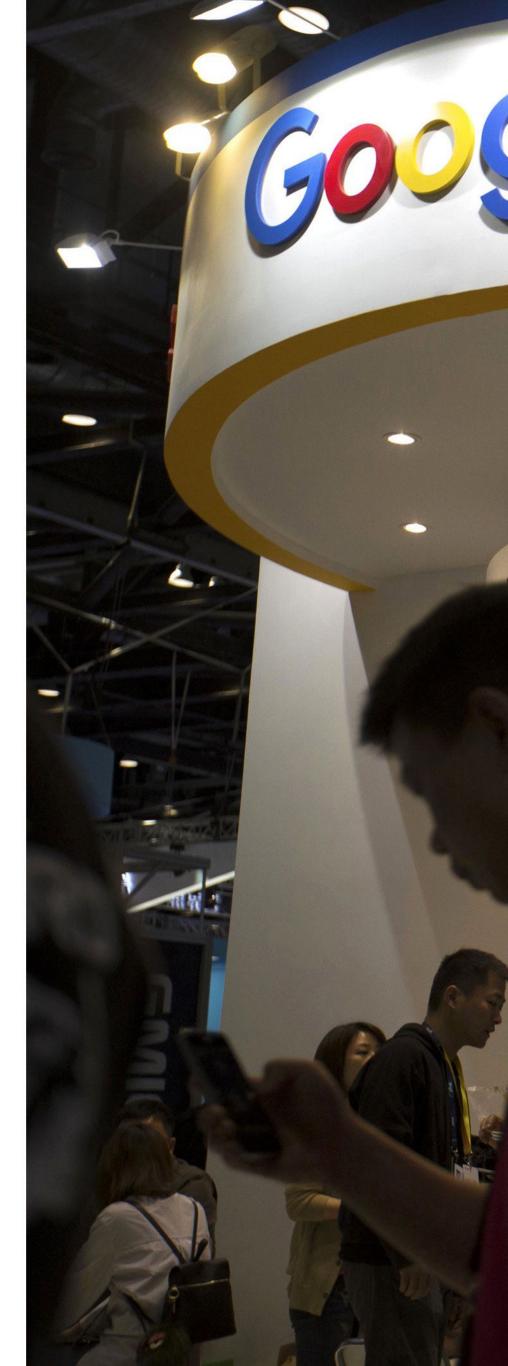
Tuesday's letter, signed by groups including Amnesty International, Human Rights Watch and Reporters Without Borders, said China's controls over the internet have only strengthened since then amid an overall crackdown on civil liberties and freedom of expression. The letter said it would be difficult for Google to relaunch a search engine "in a way that would be compatible with the company's human rights responsibilities under international standards, or its own commitments."

According to online news site The Intercept, Google created a custom Android app that will automatically filter out sites blocked by China's so-called "Great Firewall."

Google co-founder Sergey Brin was born in the Soviet Union in 1973 and lived there until age 6 when his family fled. He has said his experience with a repressive regime shaped his and the company's views.

However, Pichai, who became CEO in 2015, has said he wants Google to be in China serving Chinese users.

In December, Google announced it was opening an artificial intelligence lab in Beijing, and in June, Google invested \$550 million in JD.com, a Chinese e-commerce platform that is second only to Alibaba in the country. The companies said they would collaborate on retail solutions around the world without mentioning China, where Google services including Gmail and YouTube are blocked.





# YOURBRANDHAS BEEN N SUCH CONTROL OF A SUCH CONTR

ads@techlifenews.com





#### SOCIAL NETWORKS

Y

**Twitter** @TechLife\_News twitter.com/#!/TechLife\_News



SUBSCRIPTIONS

TechLife News Website

iTunes App Store<sup>™</sup> / Newsstand itunes.apple.com/app/techlife-news/id529054466?mt=8

#### CONTACTS

Executive Director - ceo@techlifenews.com Relationship Management - crm@techlifenews.com Editor - editor@techlifenews.com Advertise - ads@techlifenews.com Social Network - network@techlifenews.com Promotions - promo@techlifenews.com

#### **EXECUTIVE DIRECTOR**

Ivan Castilho Chief Executive Officer / Design Conception

**MINDFIELD DIGITAL ART & GRAPHIC DESIGN** 

Glauco Ribeiro Chief Design Officer / Art & Graphic Design Director

Michael Danglen Art & Graphic Design Producer

Anderson Oliveira Art & Graphic Design Producer

**OFFICIAL WEBSITE** 

Yogh Inc. WordPress Production & Website Support

Lucas Carvalho Production Director

Fellipe Giesel Web Designer / Producer

Filipe Siems Web Designer / Programmer

## WRIWRITERS

Precise English Inc. Benjamin Kerry (UK) Gavin Lenaghan (UK) Craig Lenaghan (UK) Elena Lusk (US)

#### COLUMNS

iTUNES REVIEW Benjamin Kerry

FINANCE NEWS <u>Associated</u> Press / Bloomberg

#### REVISION

Gavin Lenaghan Elena Lusk

**PRODUCTION SUPPORT / COLLABORATORS** 

Rui da Costa Segolene Vincent Lise Berda James Jarvis Richard Sawyer Lauren Brown Matthew Coburn Jeffrey Milks Gustavo Leite Susan Kiesling Raquel Serrano Robert Fluellen Lisa Swiniarski Roger Gayalkar Gustavo Labanca Held Souza

PRIVACY POLICY techlifenews.com/privacy-policy/

TERMS OF USE techlifenews.com/terms-of-use/

### TECHLIFE NEWS© Copyright 2016-2012. All Rights Reserved.

No part of the document may be circulated, quoted, or reproduced for distribution without prior written approval. Proper Trademark Notice and Attribution iPad<sup>™</sup>, iPhone<sup>™</sup>, iPod<sup>™</sup>, Mac<sup>™</sup>, iMac<sup>™</sup>, Macbook<sup>™</sup>, iOS<sup>™</sup>, OS X<sup>™</sup> are trademarks of Apple Inc., registered in the U.S. and other countries. Please contact support for additional trademark ownership rights information. The following is a list of Apple's trademarks and service marks http://www.apple.com/legal/ trademark/appletmlist.html. All other trademarks are the properties of their owners.

TechLife News is an independent publication and has not been authorized, sponsored, or otherwise approved by Apple Inc.

# TechLife

TechlifeNews.com