I WILL & I CAN
Jai Hind

Inside the Issue

NORTH KOREA, THE GREATEST HACKERS?

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COMPUTER PROGRAM LOOKS FIVE MINUTES INTO THE FUTURE

Computer scientists at the university of Bonn have developed a software that can look five minutes into the future. The goal was to see if a program could list a sequence of actions, up to five minutes into the future based on watching the first few steps of an activity. Specifically, they trained software to guess what a chef would do next by showing it a number of videos of people making breakfast or a salad. The program first learns the typical sequences of actions from video sequences, then it can predict in new situations, what the most frequent action will be performed next.

"We want to predict the timing and duration of activities minutes or even hours before they happen", says research team leader Jürgen Gall."

We as humans are very good at anticipating the actions of others. For computers however, this type of reasoning is still in its infancy. At the extreme end, the scientists discovered that their trained program could correctly predict an action and its duration, three minutes in the future roughly 15 percent of the time. This could develop solid ground for future AI that could potentially develop super-human foresight!

HOW NORTH KOREAN HACKERS BECAME THE WORLD'S GREATEST BANK ROBBERS

" In February of 2016, the North Korean hackers committed the greatest heist against a United States bank in history and the interesting part is that the thieves never even set foot on American soil."

The Reconnaissance General Bureau(RGB), North Korea's equivalent to the CIA, has trained up the world's greatest bank-robbing crews. In February of 2016, they did not target some ordinary bank. They struck an account managed by the Federal Reserve Bank of New York, an institution renowned for its security.

Let me tell you something about the Federal Reserve Bank of New York, in vaults 80 feet below the streets of Manhattan, the bank holds the world's largest repository of gold.That's what the thieves went after: nearly $1 billion, sitting in a Fed-run account and this account belonged to Bangladesh. Already hacked into the servers of the Bangladesh Central Bank, the criminals were ready and waited until a Friday—a day off in many Muslim-majority nations, Bangladesh included.Posing as Bangladesh Central Bank staff, the hackers sent a flurry of phony transfer requests to the Fed totaling nearly $1 billion. The Fed started zapping cash into accounts managed by the thieves overseas, most of them in the Philippines. From there, the trail went cold. Most of the bogus requests were caught and canceled by suspicious personnel. But they did end up with an amazing score: $81 million.

TECH HACK

The song "Bohemian Rhapsody" is the perfect music piece to test headphones and speakers to because of the range of highs and lows

Meet Sophia, a social robot created by former Disney Imagineer David Hanson. Modeled in part after Audrey Hepburn and Hanson's wife, the robot was built to mimic social behaviors and inspire feelings of love and compassion in humans.

Ever since her unveiling in 2016, Sophia has rocketed to stardom. The robot has sat for TV interviews, appeared on the cover of ELLE magazine, been parodied on HBO, and was appointed the UN's first non-human "innovation champion." In a ceremony promoting a tech conference, the kingdom of Saudi Arabia even conferred citizenship on Sophia. Eventually, Giulio Di Sturco became the first photographer to step inside Hong Kong-based Hanson Robotics. The setting's strangeness only deepened once he started photographing his most peculiar subject.

"In the beginning, it was a bit difficult. [Sophia] didn't recognize the camera ... but after three days, she kind of learned," Di Sturco says. "I don't know if the engineer put something in the software, or if she went online and did some research, but she started to pose. "

"It was actually really strange—at one point, I realized I was even speaking with her," he adds. "I had to step back and realize that she was a robot, not a human being." Through a mix of tourism, tech, and infrastructure, non-oil revenue is predicted to grow from $43.4 billion to $266.6 billion annually. Sophia's announcement also raises a number of questions. What does it mean to be a citizen? What rights does Sophia hold? Perhaps it will create a 'personhood' option, as proposed by the EU committee in January, regarding the rights of robots.The team at Hanson Robotics said they didn't expect Sophia to take off as much as she did. Her physical appearance is another example of what some see as a traditional representation of conventionally attractive, submissive-by-design female robots.

ARTIFICIAL INTELLIGENCE TO DETECT OFTEN MISSED CANCER TUMORS.

Researchers at the University of Central Florida have taught a computer how to detect tiny specks of lung cancer in CT scans, which radiologists often have a difficult time identifying.

"The system scans thousands of faces looking for a particular pattern to find its match. This approach is similar to the algorithms that facial recognition software found on the Iphone X."

In the study, the software was able to accurately detect cancer about 95 percent of the time, compared to the 65 percent when done by clinicians. The next step will be to move the research project into a hospital setting. After that the technology could be a year or two away from the marketplace. The research team fed more than 1000 CT scans from the National Institute of Health into the software that they developed to help the software learn to look for tumors. Thanks to the University of Central Florida's research centre, doctors may soon have help in the fight against cancer.

JAI HIND'S ONLY TECH FEST

Cont. The club also ensures that the new batch has quite an informative and interesting orientation by compiling

videos and images along with student experiences so that we put forth to our freshers and their parents, a clear picture of the reality that they would soon be a part of. The department has its very own annual TechFest-Cyberstrike. This year, we unfolded a new chapter in the books of the history of Cyberstrike by introducing several new events and workshops. Before we actually come to the fest, it is worth highlighting that this year we worked in association with the Public Concern for Governance Trust (PCGT) and volunteered for their events like The Tribute Run 2018 which was a marathon. Students also volunteered at the "Unity in Diversity" event which was held at the NCPA on 26th November 2018 as a tribute to those who were martyred during the grave attacks.

Coming down to our fest on the 5th and 6th of December, we had the TechTalk for which we had the eminent dignitary Mr.Brijesh Singh who is the head of Maharashtra Police Cyber unit looking after the Cybersecurity of the Government of Maharashtra. We also introduced another event- Technovators. This aimed at giving a platform to the young technological entrepreneurs, who started from scratch and built a company with a solid product. We had Ms. Janvi from BleeTech Innovations who came forth and presented the reality of her journey through the years to stabilize and establish her company as it is today. BleeTech makes smart wearables for the specially abled and it was our privilege to host them as we could give them a platform and an audience to actually spread awareness about their venture. The fest had another highlight this year that created a lot of buzz- the Drone Making Workshop. Participants were taught the fundamentals of drone making and were also given proper guidance on how to model, program and fly an actual drone. In addition to this, the department also had student representatives who participated in the annual inter-collegiate event- "Aavishkar Research Convention", where students showcased their projects and innovations. This competition provided the students with a platform to present their research in the field of technology and also gave them the opportunity to gain insights into the world of tech. It gives me immense pride in saying that I was an integral part of this club and I can vouch for the fact that I have grown as a person in due course of managing and being a part of its various activities.

Vidisha Dalvi
Secretary

"This is the only technical fest of Jai Hind college and this year it was truly a #LevelUP"

TECH HACK
Want a quick way to unfreeze a frozen phone? Plug it into its charger.

A GLIMPSE INTO OUR DEPARTMENT

The IT and B.Voc(SD) Department at Jai Hind college has witnessed a fantastic year. Starting at the smooth admission procedures aided by the teachers and Students of our department along with the student council, followed by the first year orientation program, it kicked-off on a great note. This year also saw the SY and TY students following a first of its kind biometric attendance system. This required configuring each biometric system and uploading attendance onto a server, training for which was provided to the faculty. This system was huge success.

"To top all of this, this year saw successful placements of third year students in companies such as Larsen and Toubro with a package of 2.5L, Ernst and Young with a package of 3.5L and Capgemini with a package of 2.2L."

A special SEMINAR ON CV WRITING was conducted by the VP of JP Morgan, Farzana Marolia. Teacher's day, Christmas Party hyped up the energy and were celebrated with pomp. Sport-o-mania and Sports day saw enthusiastic participation as well.
Needless to say, this year has been path-breaking and has set a high benchmark for the future.

"The event of the year at the department, which made local news, was Cyberstrike. With tech-based events, coding contests, PUBG matches, heated debates and an array of scrumptious food stalls, this year the event witnessed a mammoth turnout of students. Excitement ran high as students competed to win events that led to the Best College award."

TECH TRIVIA
One of the first Ph.D's in computer science was earned by a nun!

TECH HACK
If you save your Powerpoint presentation in .PPS instead of .PPT, your file goes into slideshow mode when you open it!

MEET PHOTOMATH- AN APP THAT SOLVES YOUR MATH PROBLEMS BY SCANNING YOUR NOTEBOOK

One of the most dreadful subject in a student's life is mathematics. Solving equations or understanding algebra can be confusing and complicated. Due to the advent in technology, many apps are available to solve complicated equations but the app Photomath provides a unique solution . As the name suggests, Photomath solves all sort of mathematical equations with the help of a picture.

"All you have to do is position the math problem you want solved within the frame and the app crunches the numbers and pops out a solution along with an explanation."

TECH HACK
If you buy a product on Amazon, and there is a price drop within 7 days, you can get a refund on the price difference.
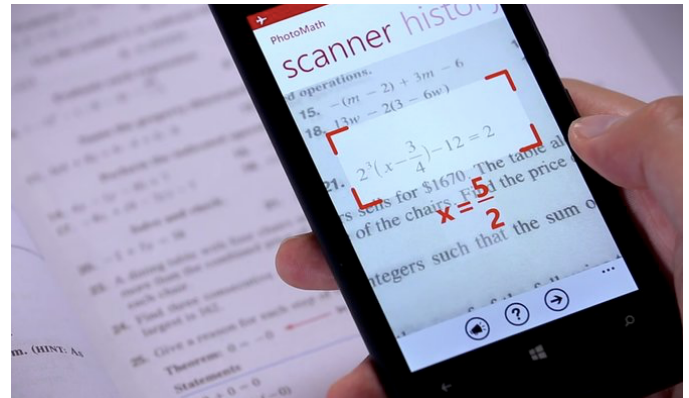
The new version of Photomath can scan both printed text and handwritten problems. This way you can just jot down the problem on a piece and scan it using your phone, making math a piece of cake for the students. The feature called Photomath+ solves problems by a step-by-step explanation and colorful illustrations. Earlier this app just helped students in completing their homework but after this update, helps students to understand the language better. Photomath is available for free on the Appstore as well as Playstore

HOUSTON WE HAVE A PROBLEM- NASA HACKED IN OCTOBER?

Upon discovery of the breach, A company-wide email was sent to employees from the agency's human resources department warning them of the hack. Once NASA is aware of who specifically was affected, it plans to reach out to them with follow-up information. The breach affected employees hired at the company between July 2006 and October 2018.
It's also not the first time NASA has been hit by a data breach. In 2011, hackers took over computers in NASA's Jet Propulsion Laboratory and 'compromised the accounts of the most privileged JPL users.

A hacker compromised one of NASA's servers containing Social Security numbers and other Personally Identifiable Information (PII) data of its current and former NASA employees. The breach was disclosed by SpaceRef. On Oct. 23, 2018, NASA cybersecurity personnel began investigating a possible compromise of NASA servers where personally identifiable information (PII) was stored. After initial analysis, NASA determined that information from one of the servers containing Social Security numbers and other PII data of current and former NASA employees may have been compromised," said Bob Gibbs, the assistant administrator in NASA's Office of the Chief Human Capital Officer, according to SpaceRef.

Did you know?
For 20 years, the password for U.S. nuclear missiles was 00000000

GET YOUR INNER GEEK ON WITH THESE CLASSICS!

THE SOCIAL NETWORK

The Social Network is a compelling movie that tells the story of Harvard student and programming genius Mark Zuckerberg, who would go on to create Facebook, and change the world forever.

THE IMITATION GAME

During WWII, mathematician extraordinaire Alan Turing's mission is to crack the Enigma machine's code used by the Wehrmacht. Turing's work be instrumental in shortening the war saving many millions of lives.

THE MATRIX

Quite possibly the most famous science fiction movie of all time (except maybe Star Wars), The Matrix depicts a dystopian future involving a simulated reality created by sentient machines.

20TH CENTURY FOX IS USING AI TO JUDGE POPULAR MOVIES

Most of the time, the studios make educated investments in the movies that might cause a buzz at the box office.

"20th Century Fox are using AI in attempts to figure out what movies people might like. They even gave their program a name: Merlin."

Merlin's job is to watch movie trailers and tag different aspects. He'll then watch other trailers to determine audience interest. The testing of Merlin was performed using the trailer for LOGAN. The study then analyzed what movies Merlin predicted and what movies Logan audiences actually went to watch. It correctly predicted 11 out of 20 movies. Merlin is still a bit of work in progress, but is proving to be decent at its job.

GREAT POWER, GREAT RESPONSIBILITY, GREAT GAME

"It's a strong open-world game with a lot of freedom, and it's balanced, cinematic action game that uses a cast of well-loved, compelling characters to tell a story about how people respond to trauma and what mark they're willing to leave."

At its core, Insomniac Games' new adventure strives to make you feel like Spider-Man. And, thankfully, Marvel's Spider-Man on PS4 succeeds at nearly every swing across Manhattan's rooftops. Marvel may have dominated superhero cinema since the first Avengers movie, but in the land of video games, DC remains king. Batman: Arkham Asylum (2009) still represents the high-water mark for superhero gaming.Now, though, the caped crusader has a worthy rival from the Marvel camp in the form of Insomniac Games' Spider-Man. Many years and millions of dollars have been invested in Insomniac's tribute to the web-slinger from Queens, and the result is undoubtedly the finest portrayal of a virtual superhero to date. In Marvel's Spider-Man, working through the story, zipping around the city, punching muggers, and catching pigeons are all compelling in their own ways.

> *Swinging through the city is an essential part of Spider-Man. The game nails it from the start, then improves it over time with unlockable abilities.*

It requires just enough strategic thinking to be interesting — you need to plan routes to make sure there are sufficiently tall structures around to hit with webs, and speed is governed by carefully timing when you start and end swings — without demanding superhuman reactions to become skilled. Ambient crimes that pop up in the world for Spidey to stop, for instance, include taking out bad guys who don't see you coming, smacking down muggers or storefront robbers, and stopping car thieves and high-speed chases. Skill-based challenges, like chasing down drones, will hone your web-slinging skills. You'll even track down the game's landmarks for Spider-Man to take photos, offering a reason to explore both the Marvel universe and real-life Manhattan.

MEET THE WORLD'S FIRST FLYING CAR

As if any proof were needed that we now live in the film Blade Runner, you'll be able to buy one of the world's first flying cars.The Terrafugia Transition will be able to fly up to 400 miles at speeds of up to 100mph. It is hybrid electric powered and has all of the normal things you'll expect from a car. That said, what it does provide extra is a parachute system, fold out wings and a 'boost' mode when you're flying. However, one thing that it does require that our old Hyundai doesn't is a pilot's licence. According to Chinese news Xinhua, they have been taking pre-orders on them starting from October. There's not a definitive price on it yet but you can safely assume that if you have to ask, you probably can't afford one. However, if you're in that particular group of pilots who constantly think "I wish I didn't have to get out of my plane to drive home" then this is the vehicle for you!