



SEOUL: TV screens show the live broadcast of the Google DeepMind Challenge Match between Google's artificial intelligence program, AlphaGo, and South Korean professional Go player Lee Sedol, at the Yongsan Electronic store in Seoul, South Korea yesterday. — AP

## GOOGLE ARTIFICIAL INTELLIGENCE PROGRAM BEATS S KOREAN GO PRO WITH 4-1 SCORE

### COMPLEXITY OF GO SEEN A KEY TEST FOR AI SCIENTISTS

SEOUL: Google's artificial intelligence (AI) program yesterday beat South Korean professional Lee Sedol in the ancient board game Go, recovering from Sunday's loss to win its fourth match in a five-game series. AlphaGo, developed by Google subsidiary DeepMind, had already clinched a series victory with its third win on Saturday, in a result that shocked the world.

The program made history last year by becoming the first machine to beat a human pro player, but 33-year-old Lee, one of the world's top players, was seen as a much more formidable opponent. "I am disappointed that the matches are over, and also disappointed that I could not end the series on a high note," Lee told reporters, thanking fans for their support and adding that he had wholeheartedly enjoyed the games. "I think the humans still have a good chance," he added.

Go, most popular in countries such as China, South Korea and Japan, involves two contestants moving black and white stones across a

square grid, aiming to seize the most territory. It is perfect for artificial intelligence research because there are simply too many moves for a machine to win by brute-force calculations, the route IBM's Deep Blue used to famously beat former world chess champion Garry Kasparov in 1997. "It was just an incredible game," DeepMind founder Demis Hassabis told reporters. Until AlphaGo's victory last year, experts had not expected an artificial intelligence program to beat a human professional for at least a decade.

The program's developers overcame the hurdles it faced with a design that enabled it to learn on its own, hoping it would be able to approximate human intuition by studying old matches and using simulated games to hone itself. "AlphaGo's win is important, because, unlike techniques used in previous programs, it is applicable generally, and can be used for many other things," said Daniel Sleator, a computer science professor at Carnegie Mellon

University. Google executives say they aim to apply the technology underlying AlphaGo to create algorithms and programs to assist humans in fields from medical care to scientific research and robotics.

Last week, Eric Schmidt, executive chairman of Google parent Alphabet Inc, told reporters he expected the technology would eventually be deployed across all of Google's services. "Artificial Intelligence can help find new strategies in fields such as health care or law," said Lee Sang-wan, a professor of brain and cognitive engineering at the Korea Advanced Institute of Science and Technology. The Korea Baduk Association yesterday awarded AlphaGo an honorary professional 9-dan title, the highest possible rank and the same as that held by Lee, for exhibiting creative and brilliant skills and contributing to the game's progress. Go Ratings, a website that ranks Go players worldwide, placed AlphaGo as fourth best, with Lee Sedol following, in fifth place. — Reuters

## MICROSOFT KUWAIT TO HOST 'INNOVATION BAZAAR'

KUWAIT: Microsoft Kuwait will showcase the latest innovative solutions at the "Microsoft Innovation Bazaar" on Sunday 20th March 2016 from 9:00 am-5:00 pm. The full day event will take place at Salwa Al Sabah Theatre & Hall where Microsoft will showcase its latest products and technologies including the latest solution for Internet of Things (IoT), Microsoft Azure, Office 365, Windows 10 in addition to showcasing great Windows 10 devices from Lenovo, Dell, Intel and Lumia. The Bazaar will bring together speakers from Microsoft, its industry peers and partners to provide the IT industry with insights into the empowering devices, apps and solutions that represent the future.

The event will include interactive sessions and demonstration stations in which Microsoft experts will provide insights into the ways in which Microsoft has been empowering businesses, educators, governments and individuals to make the most out of their key activities. Be a part of this exciting Bazaar and find out how



Charles Nahas

Microsoft can empower you to get ahead of what's next. Innovation bazaar is sponsored by Intel, Lenovo & Dell and local partners Diyar United Company & EBLA Computer Consultancy Company.

## CHINESE HACKERS BEHIND US RANSOMWARE ATTACKS

NEW YORK: Hackers using tactics and tools previously associated with Chinese government-supported computer network intrusions have joined the booming cyber crime industry of ransomware, four security firms that investigated attacks on US companies said. Ransomware, which involves encrypting a target's computer files and then demanding payment to unlock them, has generally been considered the domain of run-of-the-mill cyber criminals.

But executives of the security firms have seen a level of sophistication in at least a half dozen cases over the last three months akin to those used in state-sponsored attacks, including techniques to gain entry and move around the networks, as well as the software used to manage intrusions. "It is obviously a group of skilled operators that have some amount of experience conducting intrusions," said Phil Burdette, who heads an incident response team at Dell SecureWorks.

They also possible, Burdette said, that companies which had been penetrated for trade secrets or other reasons in the past were now being abandoned as China backs away, and that spies or their associates were taking as much as they could on the way out. In one of Dell's cases, the means of access by the team spreading ransomware was established in 2013.

The cyber security experts could not completely rule out more prosaic explanations, such as the possibility that ordinary criminals had improved their skills and bought tools previously used only by governments. Dell said that some of the malicious software had been associated by other security firms with a group dubbed Codoso, which has a record of years of attacks of interest to the Chinese government, including those on US defense companies and sites that draw Chinese minorities.

### Payment in bitcoin

Burdette said his team was called in on three cases in as many months where hackers spread ransomware after exploiting known vulnerabilities in application servers. From there, the hackers tricked more than 100 computers in each of the companies into installing the malicious programs. The victims included a transportation company and a technology firm that had 30 percent of its machines captured. Security firms Attack Research, InGuardians and G-C Partners, said they had separately investigated three other similar ransomware attacks since December. Although they cannot be positive, the companies concluded that all were the work of a known advanced threat group from China, Attack Research Chief Executive Val Smith told Reuters.

The ransomware attacks have not previously been reported. None of the companies agreed to be identified publicly. The security companies investigating the advanced ransomware intrusions have various theories about what is behind them, but they do not have proof and they have not come to any firm conclusions. Most of the theories flow from the possibility that the Chinese government has reduced its support for economic espionage, which it pledged to oppose in an agreement with the United States late last year. Some US companies have reported a decline in Chinese hacking since the agreement.

Smith said some government hackers or contractors could be out of work or with reduced work and looking to supplement their income via ransomware.

Ransomware has been around for years, spread by some of the same people that previously installed fake antivirus programs on home computers and badgered the victims into paying to remove imaginary threats. In the past two years, better encryption techniques have often made it impossible for victims to regain access to their files without cooperation from the hackers. Many ransomware payments are made in the virtual currency Bitcoin and remain secret, but institutions including a Los Angeles hospital have gone public about ransomware attacks. Ransomware operators generally set modest prices that many victims are willing to pay, and they usually do decrypt the files, which ensures that victims will post positively online about the transaction, making the next victims who research their predicament more willing to pay.

Security software companies have warned that because the aggregate payoffs for ransomware gangs are increasing, more criminals will shift to it from credit card theft and other complicated scams. The involvement of more sophisticated hackers also promises to intensify the threat. InGuardians CEO Jimmy Alderson said one of the cases his company investigated appeared to have been launched with online credentials stolen six months earlier in a suspected espionage hack of the sort typically called an Advanced Persistent Threat, or APT. "The tactics of getting access to these networks are APT tactics, but instead of going further in to sit and listen stealthily, they are used for smash-and-grab," Alderson said. — Reuters



## AVAYA INTRODUCES SMARTDXAAS

### A UNIQUE APPROACH TO ENABLE BUSINESSES

DUBAI: Avaya introduces its concept of Digital Transformation-as-a-Service - SmartDXaaS - to emerging markets, with the company highlighting its range of cloud-based solutions and professional services, designed to help organizations achieve their digital transformation objectives more easily and cost-effectively, at the annual Avaya Technology Forum in Dubai. The flagship technology event, the latest round in a series that will move on to Ireland and the US, will also see Avaya host a complete "Smart City" ecosystem in Dubai, with real-world demonstrations from public and private-sector organizations.

While enterprise CEOs are increasingly placing digital transformation at the center of their corporate strategies, organizations need trusted partners that can help them navigate today's uncertain environments, while preparing for the challenges of tomorrow. According to IDC, by 2018 70% of silo-ed digital transformation initiatives will fail due to insufficient collaboration, integration, sourcing or project management, while by 2020 more than 30% of existing IT vendors will not survive in their current forms, requiring customers to realign their preferred vendor relationships.

Speaking at the start of ATF Dubai, Avaya executives outlined how the company has successfully aligned itself with customers' needs: software and services now account for 73% of revenue, with half of all sales coming from new and cloud-enabled technologies. Avaya is also seeing the strongest demand for solutions based on an OPEX model, posting 16% year-on-year growth in its managed services business, as enterprises increasingly look to cloud-based, customizable solutions. As the only company specializing in complex business communica-

tions, built on open and mobile software platforms, and supported by a robust underlying network infrastructure, Avaya is uniquely placed to help drive customers' digital transformation strategies.

NidalAbou-Ltaif, President, Europe, Middle East & Africa and Asia Pacific, Avaya said: "Avaya's successful transition to a software and services company enables us to help organizations achieve their own digital transformation goals. SmartDXaaS is about delivering digital transformation at customers' own pace and path, with less disruption than our competitors. By leveraging our vertical industry focus, expertise and innovative technology solutions, emerging-market organizations today can take charge of their own transformation curve, and position themselves effectively against global competitors."

Visitors to ATF Dubai will experience Avaya's vision for the endless possibilities of Smart applications, all of which can be customized to suit any sector or industry-specific needs. Today, innovative private and public sector players are utilizing the latest technologies, such as mobile, cloud, social, Big Data and analytics, and the Internet of Things, to build working environments that create the building blocks of a true "Smart City" development. By leveraging Avaya's vertical-industry experience, key foundation elements - including Smart Education, Smart Healthcare, Smart Public Safety, and more - can be combined to create a complete Smart City ecosystem that meets the needs of its stakeholders.

At ATF 2016, attendees can uniquely experience: In-depth technical sessions and tailored expert engagement that showcase vertical smart solutions for governments and private

sector businesses that streamline and simplify deployment. The showcase is presented in a "smart city" environment, with real deployment examples of key industry verticals, including smart public safety, education, hospitality, banking amongst others.

How customer engagement centers are using predictive analytics and artificial intelligence to gain valuable insights into their customers and employees, allowing creation of differentiated and personalized experiences. Avaya SDN Fx Fabric Networking architecture - the first in the industry to deliver "connect anything, anywhere" simplicity, allowing customers to more easily reap the benefits of network connectivity, reliability and security. SDN Fx enables enterprises to better leverage Avaya's communications capabilities, and deploy communications-enabled applications and services agilely across the network.

The Avaya Technology Forum, which is taking place at the Intercontinental Festival City Hotel, Dubai, on March 15-17, features keynote presentations from Avaya's global leadership team, industry experts, and key technology partners. Avaya will share and showcase roadmaps and solutions to help businesses improve operational excellence, enhance customer satisfaction and drive greater competitive differentiation. Through in-depth technical sessions and tailored expert engagement, ATF 2016 is focused on helping organizations achieve their digital transformation strategies. ATF 2016 is sponsored by Axis Communications, Integrated Research Limited, Plantronics, Senetas, Siemon, and Verint. The Official Broadcaster is CNBC, the Business Media Partner is Bloomberg Business week and the Technology Media Partner is CPI Publishing.

## AMAZON SEEKS PATENT FOR BUYING ITEMS WITH A LOOK

SAN FRANCISCO: Online retail colossus Amazon is seeking a US patent on using selfies-instead of passwords for shopping when using smartphones. Seattle-based Amazon reasoned that combining sensor and camera capabilities in smartphones with face and gesture recognizing software results in higher security than passwords or identification numbers.

"Such approaches provide for user authentication without the user having to physically interact with a computing device, which can enable a user to access information by looking at a camera, performing a simple gesture such as a smile, or performing another such action," Amazon said in a patent application filed late last year. "Such an authentication can be user friendly, particularly with respect to

conventional approaches such as typing and remembering long passwords, and can provide enhanced security because it can be difficult for another person to replicate a user's face in three dimensions."

Smartphone cameras would capture video snippets to avoid being duped by a fraudster using someone's picture to impersonate them in an online transaction, according to the patent application. "The device can prompt the user to perform certain actions, motions, or gestures, such as to smile, blink, or tilt his or her head," the patent application said. Chinese internet giant Alibaba and payments firm Mastercard are reported to be working on incorporating facial recognition in transaction confirmations. — AFP