DELL
The power to do more

INFORMATION | GADGETS | TECHNOLOGY

BYTES

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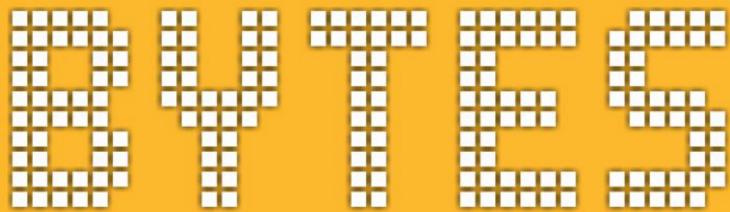
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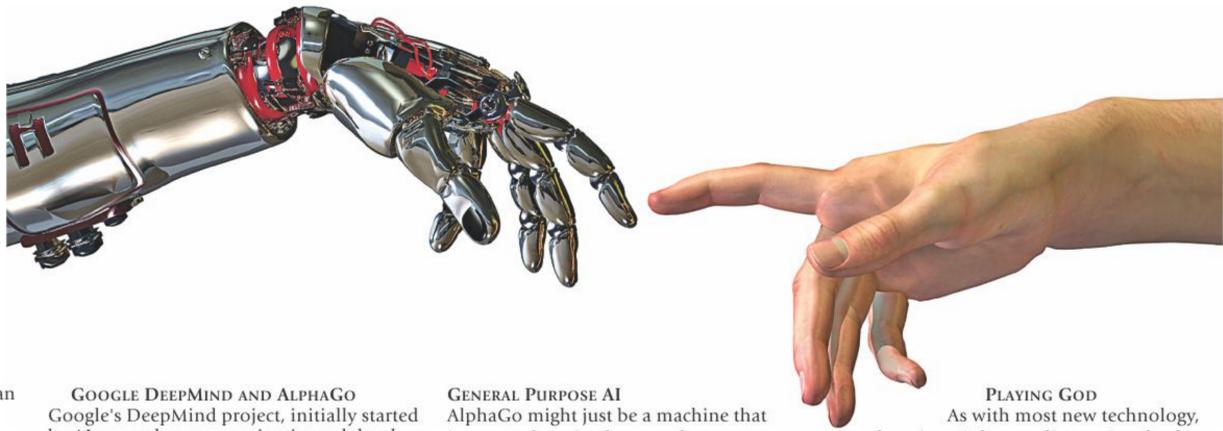
Artificial Intelligence: Flight of fancy or a legitimate step forward?

Humans, from the time it took its first primitive steps towards civilization, have relied on tools – to survive, evolve, make sense of the world around them and to shape that world to their needs. From the first rock hurled at a wild animal in self-defense, to the farmer's sickle, to the hundreds of thousands of lines of code dictating logic inside a robot, humans have used tools to overcome almost all of their shortcomings. Our tool building ability has even slowed down the process of natural selection – instead of letting our genes modify and adapt to surviving in arctic conditions like polar bears over thousands of generations, we skin animals using our tools and wrap ourselves in fur as protection from the cold.

All of this has a deeper meaning when contemplating the future of our species. In terms of the way humans worked, the Hunter-Gatherer age lasted tens of thousands of years, the Agricultural Age lasted thousands of years, the Industrial Age lasted just a little over a century and the current Information Age is expected to last only a few decades. What comes next? According to Maurice Conti, futurist and Director of Applied Research & Innovation at Autodesk, we are at the cusp of what people are calling the "Augmented Age".

The Augmented Age

According to the people at the forefront of this revolutionary new approach to the way humans use or will use tools, the technology of the future is expected to naturally augment human learning, designing and building in a way that surpasses what humans could do alone or with tools that only do what is asked of them. The distinction between augmenting technology and the tech that we are used to seeing all around us is a fine one, but quite important. While the tools available for mass usage at the moment are programmed to work within parameters set by the designer and have trouble functioning outside those parameters, the purpose of augmenting technology is to fill the gaps that normal human beings just wouldn't be able to plug. In essence, the augmented age will be one of machines which are open-ended, machines which go beyond normal programming to operate in the unknown, both to itself and its human masters. Machines, which possess Artificial Intelligence.

If all of this is starting to sound like the naïve day dreams of a sci-fi obsessed teen,
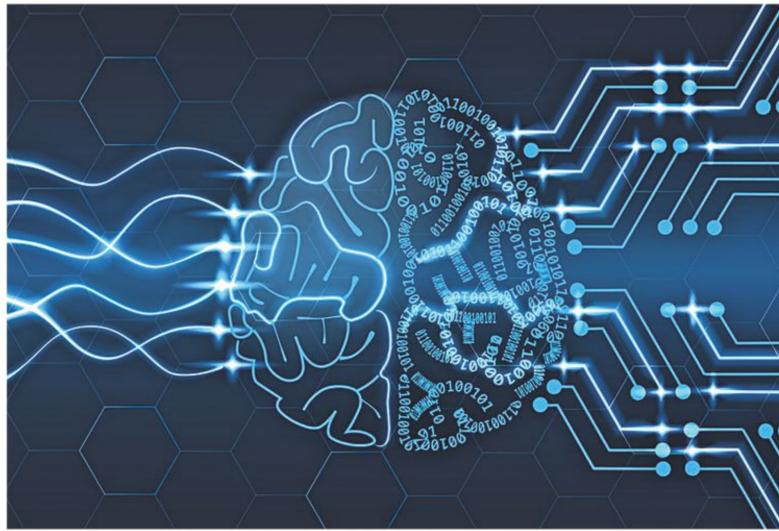
it's because we're at the foothills of a mountain that we can't even comprehend the height of, let alone know how to climb it. Machine learning and neural networks have opened up pathways which we as a species are only just beginning to explore, and yet we're seeing examples of the potential of machines imbued with the basic mechanics of identifying the world around them and learning from it.

Google DeepMind and AlphaGo

Google's DeepMind project, initially started by AI researcher, neuroscientist and developer David Hassabis in 2010 and acquired by Google in 2014, has created an AI called AlphaGo. In May 2017, AlphaGo played the ancient Chinese game of Go against the current world champion, Ke Jie, and defeated him across 3 games. Now, machines beating human players at games like Chess are quite common – what makes AlphaGo's achievement significant is that, unlike Chess, Go has more possible moves in the game than there are atoms in the universe, making it impossible for a programmer to code in all the different variations and game moves into the machine. To beat a human master at the game, the machine must learn how to play the game and "think" about possible moves and their outcomes when playing, much like a human would.

General Purpose AI

AlphaGo might just be a machine that is great at learning how to play a game, but the significance of how well it has learned a game has profound impact. To make it think like a human, the developers put it through a rigorous course of deep learning – AlphaGo's training regimen involved playing games against older versions of itself over and over, until it "learned" how to iron out its mistakes and minimise the frequency of those mistakes. It's also important to mention that AlphaGo, unlike most AI being developed at the moment, is General Purpose AI – meaning it can learn from and discern patterns in almost anything. If you give it examples of Go players using a particular strategy to outwit an opponent, AlphaGo will learn it and recall it when playing. If you give it traffic camera footage, it'll accurately predict when an intersection will be busy at a certain time of day. Give it a live feed from 360 degree cameras and engineer a fast enough reaction time, and a general purpose AI can also be in the driving seat of your future autonomous vehicle.

General purpose AI, if it continues to gain ground at the same pace, will revolutionise the way we perceive and interact with our world. Everything from financial modelling to urban planning to industrial design is set to change with the increased involvement of AI and machine learning systems. Neural networks, using a system of artificial neurons which receive signals and process them to "see" or "hear" and translate them so that the machine interface can understand them, are changing the way machines interact with their masters. While machine learning is becoming more common, true general purpose Artificial Intelligence is still farther away. Even though we're seeing more research labs picking up AI and playing around with the tech with open source resources available in some cases, there needs to be a greater drive towards developing tools we can actually use.

Playing God

As with most new technology, there is an inherent distrust involved in accepting it as a part of normal life. Douglas Adams had a rule about how we react to technology - "Anything that is in the world when you're born is normal and ordinary and is just a natural part of the way the world works. Anything that's invented between when you're fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it. Anything invented after you're thirty-five is against the natural order of things." As early as 1863, Samuel Butler suggested that the Darwinian evolution may be applicable to machines, and that they might one day become conscious and supplant humanity. While some people's paranoia of intelligent robots is slightly juvenile, there are very real fears elsewhere, when it comes to the ethics involved – let's just say an AI controlled military drone wouldn't think twice about pulling the trigger and firing rockets at civilians. Considering it's a nascent industry, regulations and involvement of watchdogs is much needed, not to mention using a strict code of morals when developing AI.

By creating machines in our image, humanity is getting closer and closer to actually creating intelligence. Can an intelligent machine be intelligent "life", though? Since an intelligent machine doesn't have consciousness per se, they're still quite distinct from humans with a conscience and a moral hierarchy. Playing god and creating intelligence sounds like science fiction, but we've already taken the first few steps towards a new age for humanity. Where that leads is still in the unknown, although one thing is for certain – we live in very interesting times.

SHAER REAZ

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eGeneration makes Technology Research Agreement with United International University

eGeneration Ltd. and United International University have signed a collaborative research agreement on Sunday. The Memorandum of Understanding (MoU) sets out a framework to work collaboratively on research and development of new and emerging technologies. Shameem Ahsan, Chairman of eGeneration Group; SM Ashraful Islam, Executive Vice Chairman of eGeneration Group; Monowar Hossain Khan, Chief Business Development Officer, eGeneration Ltd.; Emran Abdullah, Head of Operations, eGeneration Ltd.; Md. Aksadur Rahman, Program Manager, eGeneration Ltd.; Professor Dr. M. Rezwan Khan, Vice Chancellor of United International University and Professor Dr. Chowdhury Mofizur Rahman, Pro-Vice Chancellor of United International University, Associate Professor Dr. Salekul Islam (Head of CSE Dept.), Professor Mohammad Nurulhuda, Associate Professor Dr. Khandakar A Mamun and Assistant Professor Mr. Suman Ahmed (Director CDIP) were present at the agreement signing ceremony held at the university campus in Dhanmondi.

Doctorola ties up with Square Hospitals

Internet-based medical appointment start-up Doctorola.com recently signed an agreement with Square Hospitals Ltd. which will enable users to book appointments of the doctors online. The agreement was signed by Mr. K. M Saiful Islam, Director of Square Hospitals Ltd. and Mr. Mohammad Abdul MatinEmon, Managing Director & CEO of Doctorola Ltd. on behalf of their respective organisations. From others present were Mr. Md. EsamEbneYousuf Siddique (Chief Administrative Officer), Dr. Md. Faisal Zaman (Deputy General Manager and Head, Marketing & Business Development), Mr. Reaz Ahmed (AGM, ICT Services) and Ms. RejinaAkter (Manager, Business Office) of Square Hospitals Ltd.

Gadget roundup

As you read this Apple will be presenting a keynote highlighting upcoming developments. One could be about the iOS 11 which might offer a battery saving mode where most pixels would be turned off to preserve even more energy. This would be similar to the Apple Watch. That seems to be the right way to go especially if they go through with their OLED iPhone as rumoured.

Snapchat versus Instagram

Snapchat hasn't really kicked off in Bangladesh except among the 18-24 crowd. Even then it remains mostly unexplored. Now that Instagram has introduced the stories feature, it seems even less likely to pick up. Up to 2016, Snapchat had around 158 million daily active users worldwide. Instagram Stories that basically is a cloned feature from Snapchat, now has more than 200 million users per day. Although if you look at it, it's mostly personal stories on Snapchat and celebrity/product stories on Instagram. Which means a huge portion of the 600 million user base is checking out or uploading on Instagram Stories. This hardly affects anything in Bangladesh as we often catch up two years later. But the rest of the world thrives on visual stories.

What is Snapchat's response? They are hoping to capture a part of the lost market with the aptly named

Spectacles. It debuted in USA last year and hitting Europe just now. Spectacles is a camera-equipped sunglasses £129.99 / €149.99. Apparently, more than 55 million people use Snapchat daily in Europe for at least 30 minutes a day. Question remains: do we need another camera when there's a good one on the phone? And how comfortable will you feel talking to someone wearing them?

Wacom pens for different platforms

Enough of phones. I'm a big fan of Wacom. They make the best digital drawing devices on this side of a pen. Wacom recently introduced two new styluses for their entry level Bamboo series. Bamboo Ink designed for Windows is mostly for writing and is equipped with three different hardness of nibs for well, three different tactile experiences: soft, medium and hard.

The more anticipated one is the Bamboo Sketch. This pressure sensitive stylus has a tip that can be changed for different types and is excellent for quick sketches. It's great for the long drawn out drawings too

with a 15 hour charge capacity. Although most apps don't really provide support for the pressure sensitivity. When choosing apps you need to check on that otherwise it's just a normal input device. Both cost about $80 online.

Chinese warriors: ZTE & Oppo

ZTE and Oppo both are massive in China and do relatively well in Bangladesh in the low to mid-range devices. Yet, both have superb flagships. ZTE Nubia Z17 has to be the most powerful device to come from China. A range topping Snapdragon 835 processor (also used by Xiaomi Mi6) is supported by a crazy 8GB of RAM. Dual cameras are now the norm but the battle is on pixel count once again. Rear cameras are 23MP and 12MP supported by a 16MP front camera. It is also the first device to support Qualcomm's Quick Charge 4+ allowing a phone to reach 50 percent juice in under 25 minutes. Available only in China it tops out at about $583 for the maxed out version.

Oppo isn't far behind as their next R11 leaks are flooding the internet. A Snapdragon 660 processor is supported by a 4GB RAM and the required 20MP dual camera setup. If that's not enough, it'll be followed by a bigger R11 Plus.

Pirates of Samsung

Merchandising is the big money maker for marketers. But sometimes they are pointless. Case in point, which is literally a fancy case wrapped around a new Samsung S8 with Pirates of The Caribbean theme. Same phone albeit in a treasure chest and a fancy wallpaper package so that Disney can cash in on Johnny Depp's appeal. It's the 4GB of RAM with 64GB storage option going for $880. Or you could get the regular under $750 unlocked online. Just add your wallpapers. A more interesting update is the new Note8. It will come with a 6.3-inch display and an Exynos 8895 chipset possibly for our region. It is to have a dual camera setup with dual OIS and 3X optical zoom.

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