

Beating humans at their own game

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Artificial Intelligence (AI) has been a hot topic in pop-science for a while and there are valid reasons behind such popularity. But what's made AI more compelling to follow has been the triumphs of the computer over humans and mankind's silly games. Today, we take a look at a few instances where AI overpowered humans and pawned the noobs.



Deep Blue Beats Garry Kasparov
In 1997, IBM's Deep Blue beat Garry Kasparov, the world champion chess player. While there are speculations about the move that gave the game to Deep Blue, there have been speculations that it was either a glitch or that human intervention was involved. Regardless, by

the early to mid-2000s, technology had improved to the point where machines had beat a chess grandmaster with more triumphs to follow.



AlphaGo Beats Ke Jie
In May of 2017, AlphaGo "Master" took on Ke Jie, the world's highest-ranked Go player. Over the course of three games the machine comprehensively dominated the world champion. While AlphaGo had proven to be the superior Go player on the night, a new challenger emerged courtesy of Google in October of last year named Alpha Go Zero, a more sophisticated version of AlphaGo Master.



AI Masters Poker
While Go is a complex game in itself,

poker requires an entirely different set of skills which includes deception and trickery. Carnegie Mellon University's Libratus AI system spent 20 days playing 120,000 hands of No Limit Texas Hold'em Poker against four poker professionals. The human pros were no match for the machine and after nearly a month of full-time gameplay, Libratus was up by US\$1.7 million, with every one of the four professionals having lost thousands of fictional dollars.



OpenAI's Bot Beats World's Best DOTA Players

In 2017, a bot developed by OpenAI beat DOTA 2 pro Danylo "Dendi" Ishutin in a game where the demonstration was highly limited to a few variables of gameplay. In 2018, two teams of pro gamers overcame a squad of AI bots that were created by the Elon Musk-founded research lab OpenAI. After that OpenAI's DOTA 2 AI crushed world champion e-sports team with back-to-back victories.



Deepmind's AI Agents Beat Human Pros at Starcraft II

AI agents developed by Google's DeepMind subsidiary have beaten human pros at StarCraft II. AI players beat the humans 10 games in a row. However, humans were able to secure one victory against the AI in the final match.

While most of AI's dominance has happened in games with fixed unit values with no chances for random encounters, it has brought forth a significant research challenge. Games like StarCraft II are harder for computers to play than board games like chess or Go. In video games, AI agents cannot watch the movement of every piece and calculate their next move while also having to react in real time. The only limitation to AI's growth was the limitation of how much a human could teach. But with self-learning systems being implemented, theoretically there are no limitations to how much AI can learn. So, what does the future hold? Only time will tell.

Gadgets to keep your pets entertained

SADMAN SAKIB PANTHO

If you have a dog or a cat at home, it's natural to feel anxious when you have to leave them alone and head outside. Even when you are home it's not always easy for you to keep them entertained. So, let the techy world of pet gadgets make things easier for you.



Petcube Bites 2/Furbo
Petcube Bites 2 and Furbo are app-controlled pet camera and treat-tosser gadgets you can use to interact with your pets when you aren't home. Bites 2 was

designed for both cats and dogs whereas Furbo was created specifically to be used with dogs, although some pet parents also use it for cats. The Bites 2 can be mounted to a wall that gives a better view via the camera. Both Bites 2 and Furbo have an ultra-wide-angle 160-degree view camera, 1080p HD video and built-in night mode. Both gadgets allow two-way communication between the pet and the owner. The Bites 2 sends push notifications whenever it detects motion or sound. For the gadget to recognise barks, meows, pets, and humans, a paid subscription is necessary. Furbo's sensor can sense dog barking and can't figure out cat noises. Using Bites 2, you can choose to schedule the dispensing of treats for your pets and choose how long the treats can be flung. Furbo can store more treats but doesn't allow scheduling and is often slow to respond. Both gadgets cost around \$180.

Smart water fountain
Water fountains always seem to pique the interest of dogs and cats and are a great



way to keep them entertained. Moreover, if your pet is a reluctant or picky drinker, a filtering water fountain is perfect to make the act of drinking more fun for them. It is especially beneficial for cats and can go a long way in keeping them hydrated. The Catit Flower Fountain and Petkit Eversweet are some of the most efficient smart water fountains available. The latter has a number of versions and starts at around \$60. The Catit fountain has LED lights and is available at around \$30.

Playdate Smart Ball
The Playdate Smart Ball allows you to

interact and play with your pets from any corner of the world. The Playdate smartphone app acts as a joystick which you can use to remote control the ball around the house and your pet is sure to chase after it. The built-in microphone, speaker and wide-angle camera on the smart ball allow you to talk and see your furry friends as they play. The ball itself is pretty sturdy and has a replaceable outer covering. The Playdate smart ball comes in a smaller version for cats and the starting price is \$189.

