

## **Topical Feature:**

# ARTIFICIAL INTELLIGENCE

# **Discovery**

We SHARE to inspire and ignite idea

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us trending topics and we can introduce relevant titles from some 400,000 eBooks we carry & other publications from the wealth of resources.

June 2016

### **TRENDS**

# Tech Predictions for 2016: The Rise of Artificial Intelligence



2016 has witnessed the rise of Artificial Intelligence (AI). This year, there will emerge a great deal of 'bots', algorithmic discrimination will appear as a new social issue, our personalities and behaviours will be analysed by computers. Check out the highlighted AI trends in 2016.

Source: American Marketing Association (2016)

### MACHINE LEARNING

The End of Code

Codes, written by programmers, make up detailed instructions for computers to follow and perform. While in the age of machine learning, programmers no more write codes, but train the computers to acquire new skills.

Source: Wired (June 2016)

### **ALPHAGO**

### This Is not a Game

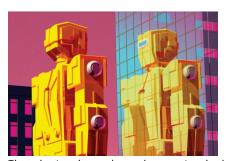


AlphaGo is smart enough to learn on its own by practicing repeatedly and learning which decisions benefit itself the most. To some extent, AlphaGo is able to think on its own and make decisions based on the algorithms it has self-taught.

Source: Wired (June 2016)

### **DFFP I FARNING**

### Machines Who Learn



Thanks to deep learning, a technique of machine learning based on neural networks and algorithms, Al talent was realized. In some fields, machines that have been trained accordingly are already able to achieve, or even surpass, human-level performance.

Source: <u>Scientific American</u> (June 2016)

### **SELF-DRIVING CAR**

### The Truth about "Self-driving" Cars



The era of self-driving vehicles is expected to massively and inevitably arrive soon. However, we still are facing a number of obstacles ahead. It is predicted that within the next 10 years the applications of automated driving systems are still limited to specific circumstances.

Source: Scientific American (June 2016)

### **OPINION**

# Should We Fear Super Smart Robots?



This is the question that people are always asking. All could become a threat when it does not conform to the values and objectives of human beings. But it is believed that machines could learn enough in a favourable way to not be a threat.

Source: Scientific American (June 2016)

**Could It Fight Cancer?** 

### Will It Destroy Us?

### A Designer's Guide to the \$15 Billion Artificial Intelligence Industry



Al is a powerful tool that empowers product designers to anticipate and accommodate to user needs and preferences. Continue to read and discover how it may be used effective for this purpose.

Source: FASTCO.DESIGN (23 June 2016)

Deep Genomics is an Al software, which analyses individual genomes. It can probe how genes interact and thus predict one's susceptibility for diseases, such as cancer. Possibly paving the way for other technologies that can prevent chronic disease.

Source: Wired (June 2016)

Source: Wired (June 2016)

Currently, there are concerns over the defence of humanity from malicious Al. To address this, Elon Musk works in tandem with OpenAl to allow people to have the freedom to maneuver Al individually.

Source: Wired (June 2016)

### **CHATBOT**

### Is It Racist?



When chatbots were developed, they learnt good words from human beings, and inevitably, captured unpleasant conversations as well. Here is an interview with a Microsoft chatbot.

Source: Wired (June 2016)

### **ART**

### Can It Make Art?



Google's DeepDream software turns ordinary pictures into dreamscapes using a convolutional neural network. A gallery to show of the masterpieces created was just held in San Francisco.



Does It Know Who I Am?

Al-powered image-recognition systems now have the abilities to analyse and understand images. The applications include providing visual aids for the blind, picking out the wanted stuff, and assisting in visual searching.

Source: Wired (June 2016)

### **ROBO-MUSIC**

# So, Let's Talk about this Song a Google Brain Machine Composed



Let's enjoy a melody written by a <u>Google Brain Machine</u>. The trend of robotics and Al is now aimed to produce music and art. Get to know more from the <u>Magenta Project</u>.

### **ROBO-FILM**

### An Al Wrote a Sci-fi Short Film by Learning from 90s Screenplays



Al program 'Benjamin' that can write screenplays! The 9-minute film was made by the research team based on a screenplay written by Benjamin, for which he has been trained on lots of sci-fi movie screenplays from the 80s and 90s.

### **ROBO-ADVISE**

# Make Way for the Robot Stock Pickers



Robots will play an integral role in the workforce of tomorrow. They are projected to work in tandem with people in the asset management sector, including selecting stocks and carrying out investment strategies.

Source: TWN (1 June 2016)

Source: <u>TWN</u> (10 June 2016)

Source: Financial Times (26 June 2016)

### **VISUAL AIDS**

### **CUSTOMER SERVICE**

Japan Robot Maker to Tackle Loneliness with R2-D2-like Machine



Japan, a country with a longstanding prowess in robotics, is developing a new robot that can respond to human emotions and thus cater especially to the growing greying population.

Source: Financial Times (7 June 2016)

Artificial Intelligence Is Helping the Blind to Recognize Objects



Two recently developed apps, EyeSense and Aipoly, are aiming at helping visually impaired people recognize objects. Additional information can be found at EyeSense's website and Airpoly.

Source: FASTCO.EXIST (13 July 2016)

How Brands Are Using Artificial Intelligence to Enhance Customer Experience



Discover the ways in which various brands are using AI techniques to improve their customer service. Such as voice recognition technology, a variety of apps and an intelligent virtual assistant.

Source: Marketing Week (18 May 2016)

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