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The Incredible Inventions of Intuitive AI: TED Talk Annotated Resource List

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Annotated Resource List

TED Talk Information

The TED talk video I watch was *The incredible inventions of intuitive AI* by Maurice Conti. This video talks about how our society today is moving into a new era of time called the "Augmented Age", where our natural human capabilities are being augmented by technology that helps us think, create, and a new nervous system that introduces us to a world far out of our natural senses. We are moving into a new point in time where human and robotics are working side by side and how one needs the other in order to function properly.

Tools we use today go into 3 phases. They started off in the passive phase. For example, the Siri tool on the IPhone is passive. You ask her questions that you do not know and you will be given an answer that she has figured out. For the last 3 and half years, the tools we have used have been passive. Artists have to give tools directions to make what they want to make. You cut paper with scissors, you give the scissors directions on where you want to cut. From that phase it goes to the generative phase, where they use computers and algorithms to synthesize geometry. In other words, they create designs themselves. Examples of this would occur if you are trying to figure out ways to make a drone, you give the computer specifications on how you want the drone to be made. The computer then comes up with every idea possible in the solution space that meets your criteria. It then returns with ideas that no human could have ever thought of. The computer started from nothing, no one told it what to do. But the computers are still working on the third phase, the intuitive phase, where they can retain information and recognize the pinnacle of strategic thought. This is phase not every AI can master. But in recent times, some companies have had success. A company named DeepMind created a computer system named AlphaGo. In march of 2016, AlphaGo beat the world's best player in the game "Go", the hardest game in the world where Conti says "There are more possible moves than there are atoms in the universe". We are coming close to the point where you can show a computer something and it will give its own opinion on it. But the main idea of this is to show how technology can amplify our cognitive abilities so we can imagine and design things that are out of reach to the human mind.

Annotated Resource List

Book Sources

Berlatsky, N. (2011). *Artificial intelligence* (Opposing viewpoints series (Unnumbered)). Detroit: Greenhaven Press.

This book goes in depth about what an AI is and how they can be used in today's world. One example is how smart cars could help ensure safety if an AI controlled it. This book would offer

background knowledge of what an AI is if they are unclear and hopefully create a better understanding of how they can become a huge impact in our society today.

Scholarly Journal Article

Kulkarni, R. 2., & Padmanabham, P. (2017). Integration of artificial intelligence activities in software development processes and measuring effectiveness of integration. IET Software, 11(1), 18-26.

This Article talks about the progress of AI so far. As talked about in the TED video, the AIs are programmed to do tasks that the humans tell them to do. In this Article, it shows how programmers make AIs program computers, create software, as well as present information to people.

STUART, S. (2017). How Do You Feel? Affectiva's AI Can Tell. PC Magazine, 12.

This article talks about an AI that has been programmed to read the emotion of anyone judging by their face. This machine is constantly learning about human expression and organizing it into emotions that humans feel. This relates to the AI's leap into the intuitive phase of retaining information and learning new things from new information and information that has been previously stored.

Reference Sources

Sgarbas, Kyriakos N., & Strasny, Philipp. (2005). Artificial Intelligence. *Routledge Encyclopedia of Linguistics*, Routledge Encyclopedia of Linguistics.

This reference source talks about the progress of creating AIs to solve problems on humans can do as well as talking about different types of AIs. Also talked about in the TED video, AIs go into phases. Symbolic AIs are made to prove theorems, which means they are in the generative phase. Sub-symbolic AI gain intelligent behavior without using meaningful symbols, further progress of generative AIs. A generic AI has attained perception, reasoning, knowledge, and learning. Their ability of learning information is a sign they have entered the intuitive phase.

Internet Sources

Press, G. (2017, February 27). Amazon, Google, Salesforce And Leading Roboticists On The Golden Age Of AI. Retrieved February 27, 2017, from https://www.forbes.com/sites/gilpress/2017/02/27/amazon-google-salesforce-and-leading-roboticists-on-the-golden-age-of-ai/3/#1ce67f155836

This article talks about big companies incorporating AIs into their work and how it is helpful to their customers. For example, Amazon talks about their new Amazon Echo, Alexa, who can perform thousands of tasks at any given moment with a command just by asking as well as

having conversations with her. This article helps support the improvements of the passive phase talked about in the TED video, when tools can be used to answer any question you have.

Bansal, M. (2017, February 27). AI is the New Black. Retrieved February 27, 2017, from https://www.technologyreview.com/s/603748/ai-is-the-new-black/

This article talks about the increase demand in AIs in the business world today. This adds on to the intuitive phase of an AI. Machines that are being able to retain information and to mimic the function of the brain are becoming more frequently built, showing that it is becoming easier to get AIs to think like us.