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# AI will replace humans altogether

*Quiz-4 Assignment*  
*CSE: 4711 Artificial Intelligence*  
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Growing up as a kid in an era where science fiction clips are easily available on the internet with all sorts of theories on how humanity is being revolutionized by computers, it is safe to assume that we all have a bias toward seeing Artificial Intelligence or AI succeed. Apart from this subconscious conditioning by the environment, based on the experience I had studying computer science for the last four years, I, too, have acknowledged the immense potential of AI. AI replacing humans might be a bit farfetched; however, delving into the subject might reveal some uncomfortable, questionable, yet compelling findings.

Before diving deep into the potential of AI, let us have a look at the current state of AI in order to get a better idea of where we are heading to. We have neural networks performing classification tasks at an approximately human-level accuracy or beyond. The tasks range from vision-based classification tasks to learning how to fly a remote-controlled helicopter. AI can figure out a way to solve complicated tasks when provided with a good amount of data. And at times, they can come up with unexpectedly more efficient solutions, e.g., controlling an R.C. helicopter upside down for an efficient flight. Let us not forget the innumerable times AI has beaten humans in games developed by humans like chess, go, backgammon, Dota-2, etc. Obviously, outperforming humans in many such tasks has huge potential but can AI go beyond that?

When we thought Neural Networks became saturated, a new architecture was introduced, called Transformers, which revolutionized many domains of AI. Natural language processing based on text and audio, video processing, and visual question answering – just to name a few, were drastically improved by such a pioneering architecture. But what's more shocking is the time it took for humans to come up with this architecture. Neural networks gained popularity in 2012, and transformers got introduced in 2017; merely 5 years after NNs were popularized. Based on the recent trends, it is safe to assume to it won't take too long for scientists and engineers to come up with another revolutionary architecture that would break all previous state-of-the-art records.

So, where are we heading from this point? AI is improving at a considerably rapid pace. And they have started to mimic a good number of human activities. AI robots can solve cubes, fold clothes, and parkour with ease (have a look at the robots from Boston Dynamics). We are getting to know ourselves better by looking at AI. They are slowly becoming the reflection of the human brain itself. And, I won't be the first person to envision AI becoming a threat or replacement to humanity, prominent figures like Elon Musk and Steven Hawking also deemed the same.

With sufficient computational power, maybe one day, AI will be able to generalize a lot of human-like activities and might surpass us in those. They might, one day, take more important roles in a system being more reliable than humans. And they might, one day, outnumber humans in every domain out there. The future is tough to predict but based on the current trends, we can assume AI to be the successor to humans and take their place at the top of the hierarchy of beings on Earth. We might as well be replaced in 50, 100, or more years... or maybe less?