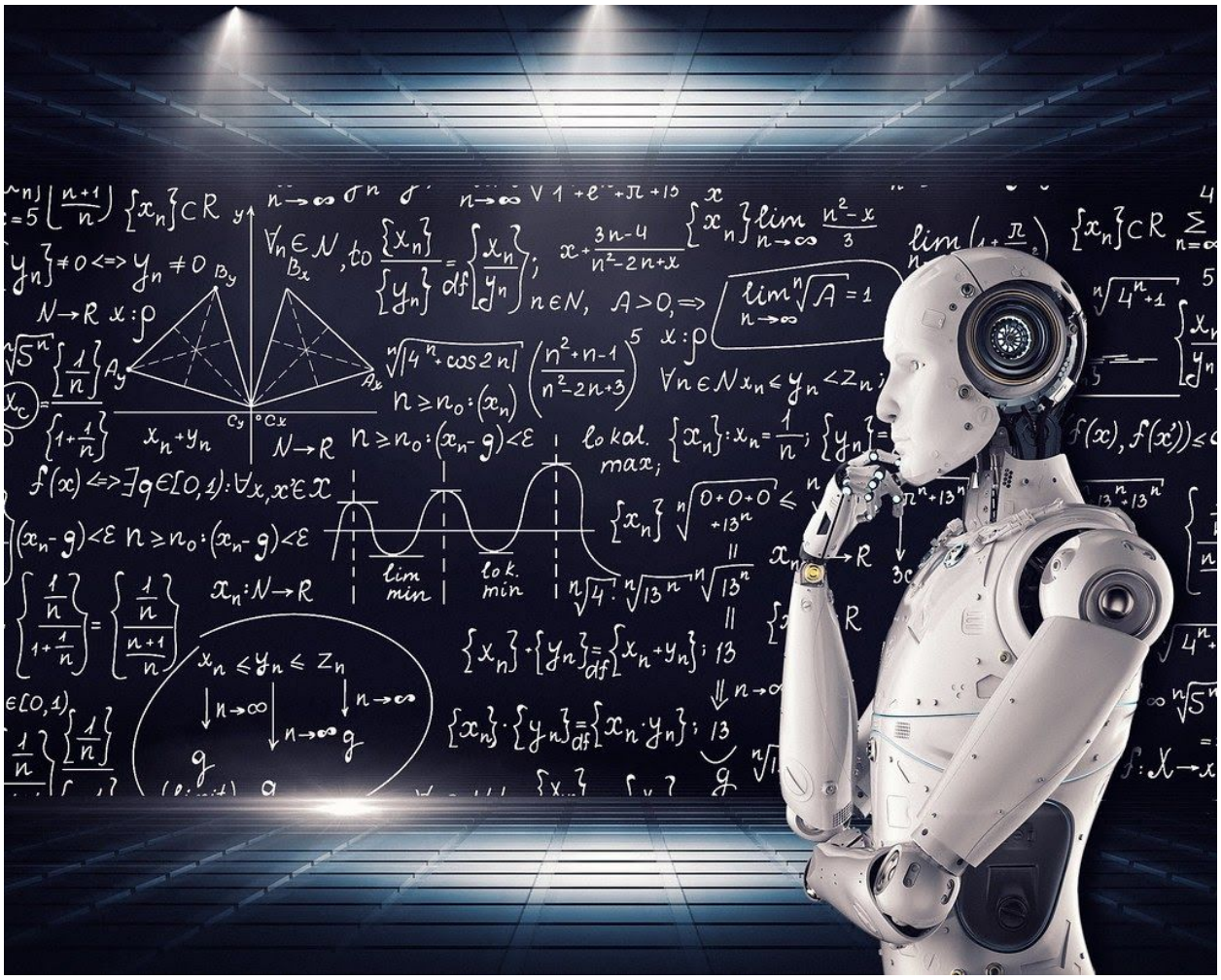
Self learning AI



Self learning AI

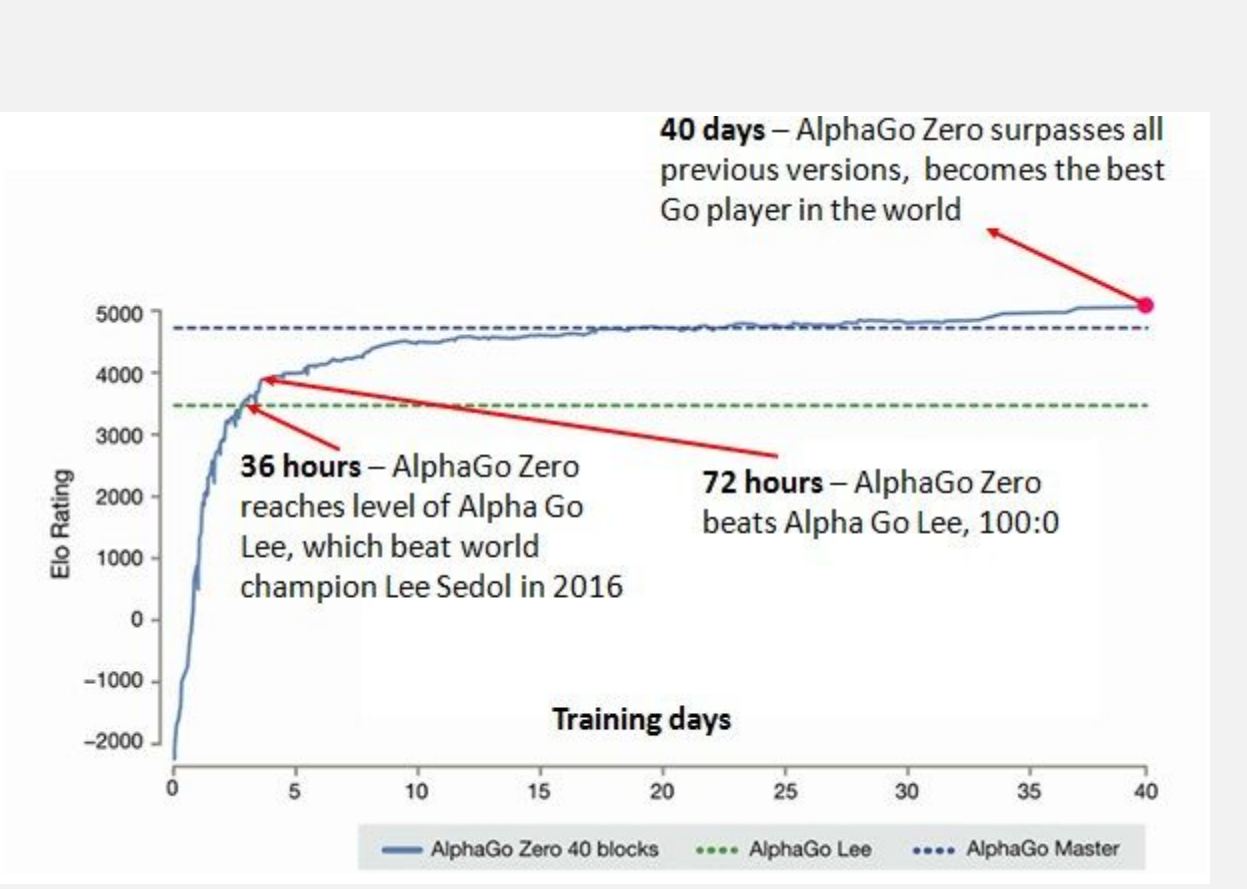
Self learning AI is a big step forward in the evolution of AI and machine learning. Alphago zero alphago alphazero and muzero all displayed exceptional talent. This is one example of how this area of AI is growing. According to david foster **AlphaGo** → **AlphaGo Zero** → AlphaZero

In March 2016, Deepmind's AlphaGo beat 18 times world champion Go player Lee Sedol 4–1 in a series watched by over 200 million people. A machine had learnt a super-human strategy for playing Go, a feat previously thought impossible, or at the very least, at least a decade away from being accomplished.

Match 3 of AlphaGo vs Lee Sedol

This in itself, was a remarkable achievement. However, on 18th October 2017, DeepMind took a giant leap further.

The paper '**Mastering the Game of Go without Human Knowledge**' unveiled a new variant of the algorithm, AlphaGo Zero, that had defeated AlphaGo 100–0. Incredibly, it had done so by learning solely through self-play, starting 'tabula rasa' (blank state) and gradually finding strategies that would beat previous incarnations of itself. No longer was a database of human expert games required to build a superhuman AI .



A graph from 'Mastering the Game of Go without Human Knowledge'

A mere 48 days later, on 5th December 2017, DeepMind released another paper **'Mastering Chess and Shogi by Self-Play with a General Reinforcement Learning Algorithm'** showing how AlphaGo Zero could be adapted to beat the world-champion programs StockFish and Elmo at chess and shogi. The entire learning process, from being shown the games for the first time, to becoming the best computer program in the world, had taken under 24 hours.

With this, AlphaZero was born — the general algorithm for getting good at something, quickly, without any prior knowledge of human expert strategy.