

Reinforcement learning is better than human judges

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Catherine Maticic wrote an article entitled "Are algorithms good judges?" (1). Answer is "yes". Reinforcement learning without human knowledge which is one of machine learning algorithms is better than any human champions in the game of Go (2). In other words, reinforcement learning system can learn by itself using data where better algorithms are automatically created and competitions among them can further improve their qualities. Since our lifetime is limited, we have a limited time for exercises in order to improve our skills. Reinforcement learning can be trained within a short time with massive computer resources which may be equivalent to more than 1000 years' human training. Reinforcement learning "elmo" is a champion algorithm in the game of Shogi in 2017 (3). Machine learning algorithms have been evolving from human-teaching with supervised learning to training-by-itself with reinforcement learning without human knowledge.

References:

1. Catherine Maticic, "Are algorithms good judges?" *Science*, 19 Jan 2018: Vol. 359, Issue 6373, pp. 263
2. David Silver et al., "Mastering the game of Go without human knowledge," *Nature* 550, 354–359 (19 October 2017)
3. <http://www2.computer-shogi.org/wcsc27/>