【Research Review】 Mastering the game of Go with deep neural networks and tree search(AlphaGo)

A brief summary of the paper's goals or techniques introduced.

Goal summary

Goal in this paper is to master Go with artificial intelligence.

techniques introduced summary

Goal in this paper is to master Go with artificial intelligence.
For that purpose, this paper proposes two deep neural networks.(`value networks/policy network`)

These networks are trained by a novel combination of supervised learning from human expert games, and reinforcement
learning from games of self-play.

And introduced `combines Monte Carlo simulation with value and policy networks.`

A brief summary of the paper's results.

Using this search algorithm,
our program AlphaGo achieved a 99.8% winning rate against other Go programs, and defeated the human European Go
champion by 5 games to 0. This is the first time that a computer program has defeated a human professional player in the
full-sized game of Go, a feat previously thought to be at least a decade away.