Research review

Mastering the game of Go with deep neural networks and tree search

- summary of the paper's results

In my country, South Korea, there was a Go challenge match with AlphaGo and Sedol Lee in last year. Go is a very ancient game and it's one of the most complex game. AlphaGo is Go game program that developed by Google DeepMind. As you know, the result was a victory of AlphaGo. This was a very important milestone of Artificial Intelligence. So, I was interested in this topic and choose it.

According to the paper, AlphaGo was implemented by many machine learning model. Such as Convolutional Neural Network(CNN), Monte Carlo tree search (MCTS) and Reinforcement learning. Actually it was very hard for me, because I am a just a entry level developer. But, it was very interesting. In this paper, AI program won the game against professional human player.

- summary of the paper's goals or techniques

In this paper, main concepts are that CNN and MCTS. And CNN was implemented by Deep neural network and MCTS was implemented by Monte Carlo rollouts. And the author told some techniques, I think those are little similar to my project(Alpha-beta pruning). Mainly, he told reducing sub tree in MCTS and building a CNN.