

AlphaGo`s configuration, core principle

In recent years, deep convolutional neural networks were able to achieve good results in face recognition and image classification. The Google AI even taught himself to play the 49 old Atari games. In AlphaGo similar neural networks interpret positions of stones on the board and help to evaluate and select moves. Google researchers used the following approach: they used networks of value (value networks) and networks of policy (policy networks). Then these deep neural networks are trained both on games, played by people, and on games played against their copies. A search technique that combines the Monte Carlo method with value networks and policy networks is also all-new.

Neural networks were trained during several stages of machine learning. First of all, a controlled training of policy network was provided directly using moves of people-players. Other policy network was exposed to reinforcement learning. The second one played with the first and optimized it, so that the policy shifted to winning, and not just to moves prediction. Final learning stage is intended to use reinforcement of value network, which predicts the winner of games played by policy networks. The eventual result – AlphaGo, is a combination of the Monte Carlo method with value networks and policy networks. An impressive result of correct prediction of the next move in 57% of cases was achieved. Before AlphaGo, the best result was 44%.

As input data for the training, 160 thousand games with 29.4 million positions from the KGS server were used. The games were taken from the 6th to 9th dan players. Million positions have been allocated for the test and the actual training was carried out with 28.4 million positions.

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RIGHT MANAGERS: ONE STEP FURTHER

To develop the right managers, you need to seek out the hybrids: those that will go one step further. If your candidates have just six of the following ten signs of leadership, it is worth investing in them.

Real good managers are hard to find. But once you have found them, it's worth investing the time and money to "grow" and develop them. There are six steps needed to grow managers effectively:

1. First, you need to select good seeds.

The candidates must have ability, EQ and IQ. Stability and motivation are also a must.

2. Prepare the land.

Your company must provide the managers with the right office and equipment, as well as a healthy corporate culture.

3. Enrich the soil by watering, weeding and fertilizing.

Update all systems and deal with problem people. Remove obstacles to performance.

4. Rotate the crops.

Encourage a variety of experiences. Send managers to different parts of the organization or to branches in different countries to gain new ideas.

5. Occasionally let a field fall fallow.

Give time-out opportunities. Allow sabbaticals and encourage educational experiences.

6. Understand the environment in which your manager works best.

The relationship between people and their jobs is dynamic.regular review so that changes can be made, if necessary.

Developing managers is all about increasing their capabilities. It's about allowing talented people to work in their own way so that they are naturally productive. It is also important to walk a fine line between coercion and incentive in order to make sure that managers acquire and practice new skills. They seek out the opportunity to learn and enjoy acquiring skills and knowledge.

Right managers act with integrity and take responsibility for their actions. They can adapt to cultural differences and enjoy cultural variety in business and social life. They want to have an impact on the business and are prepared to make personal sacrifices to do so.

Only good managers bring out the best in people, as they understand individual differences. They are not afraid of doing something unpopular, and they don't give up in the face of opposition. Right managers learn from mistakes, can change direction if necessary.

Finally, good managers deal well with stress. They know when to seek help from the right people at the right time. This is an underestimated management skill, but an important one it doesn't help to have an unhealthy leader, no matter how brilliant.

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