

## MASTERING ATARI, GO, CHESS AND SHOGI by PLANNING WITH A LEARNED MODEL

Another great work from the DeepMind team. However, this time it was not particularly sensational. Probably, it is because this time they did not beat any world champions.

I have to say, that was not an easy read. One of the main issues is that I do not know that much about reinforcement learning and the math they showed is way too advanced for my current knowledge. So, occasionally it got hard to understand.

This time they created an algorithm called *MuZero*. Its goal was to perform in the environments that it doesn't know. AlphaGo for example, works in a perfectly known simulated environment. However, MuZero does not do. It is also not provided with games of the rules. Therefore, its situation is more akin to real-life environment. Despite that, it performs spectacularly in all tests and achieves state-of-the-art. It seems like reinforcement learning will be a much more dominant topic in the future.