Nowadays, people play games with computer AI. Chess is one of them, and how to make the AI more intelligent is a subject which people have spent a great time working on.

To understand how chess AI works, we decided to make our own one. However, the more complicated algorithm we apply to our AI, the more time it takes for every step to make decision, which annoys us. Consequently, to speed up the performance, we parallelize it.

Our works use the evaluation policy to grade every kind of chessboard based on other’s long-term work and use Alpha-Beta Pruning to search every possible situation after current chessboard to decide which step is the best way to win the game. To speed up the performance as much as possible, we parallelize our search algorithm with pthread.