# BST vs. AVL tree search performance report:

Test setup:  
RAM: 16GB DDR4 + 8GB SSD swap memory  
CPU: Intel i5 6600k (single core performance applicable)

Test results:

Result interpretation:

Binary search tree performed worse on higher element counts. This is due to the longest possible search traversal path being higher on average than in the case of an AVL tree, which distributes tree height in such a way to avoid unnecessarily long search paths. Optimisation did not visibly improve performance on lower element count, and the savings started to diminish with higher element counts as well. Biggest time savings were observed on trees with element counts between 10 million and 50 million.