

[Home](#) \* [Engines](#) \* **Bagatur**



One of Bagatur's Logos

### **Bagatur,**

a free [open source chess program](#) under the [Eclipse Public License](#) <sup>[1]</sup> written in [Java](#) by [Krasimir Topchiyski](#) from [Bulgaria](#). The project has started around year 2000. The engine is quite strong, for example the [ELO](#) of version 1.4d is about 2500 based on [CCRL](#) <sup>[2]</sup>. The open source project is hosted at [GitHub](#) <sup>[3]</sup>, where one can find everything relevant like downloads and java source code of the program. Under [Windows](#) and [Linux](#) the program hasn't its own user interface and uses arbitrary [UCI](#) user interfaces like [Arena](#). Under [Android](#) there is a game called [Chess Art For Kids](#) <sup>[4]</sup> with an own [GUI](#), which incorporates Bagatur as a chess engine.

## **Table of Contents**

[Etymology](#)

[Technical Information](#)

[See also](#)

[Forum Posts](#)

[External Links](#)

[Chess Engine](#)

[Misc](#)

[References](#)

[What links here?](#)

## Etymology

[Bagatur](#) ([βαγατουρ](#) or [βογοτορ](#)) is a higher rank of [proto-Bulgarian warrior](#). According to some authors the word comes from [Turkic](#) (bagadur) and literally means [brave](#), brave man. According to the same in the [Russian language](#) will pass as [Богатыри](#) - [hero](#).

## Technical Information

The programming code is structured in multiple Java [modules](#) / [APIs](#), which could be used separately, including modules for experiments with [Artificial Intelligence](#) and [Machine Learning](#). More details could be found inside the readme files of each sub-project of the programming code <sup>[5]</sup>. Here are some of the algorithms and heuristics applied in Bagatur:

- [Search](#)
  - [MTD\(f\) algorithm](#)
  - [Iterative Deepening](#)
  - [Internal Iterative Deepening](#)
  - [Principal Variation Search](#)
  - [Quiescence search](#)
  - [Static Exchange Evaluation](#)
  - [Killer Heuristic](#)
  - [History Heuristic](#)
- [Selectivity](#)
  - [Mate Distance Pruning](#)
  - [Verified Null Move Pruning](#)
  - [Recursive null moves](#)
  - [Late Move Reductions](#)
  - [Static pruning](#) of [Alpha nodes](#)
  - [Check Extensions](#)
- [Tables](#)
  - [Transposition Table](#) with [Zobrist Hashing](#)
  - [Evaluation Hash Table](#)
  - [Pawn Hash Table](#)
- Misc
  - [Board Representation](#) - mix between [Arrays](#) and [Bitboards](#)
  - [Opening Book](#)
  - [Gaviota endgame tablebases](#)

## See also

- [Chess Art For Kids](#)
- [Military](#)
- [Mythology](#)

## Forum Posts

- [BagaturChess -an interesting chess engine](#) by [Ruxy Sylwyka](#), [CCC](#), August 11, 2011
- [BagaturChess 1.2c \(Java\)](#) by [Krasimir Topchiyski](#) by [Ruxy Sylwyka](#), [CCC](#), December 04, 2011
- [Check Latest Bagatur Version!](#) by [George Speight](#), [CCC](#), September 15, 2012

## External Links

### Chess Engine

- [GitHub - bagaturchess/Bagatur-Chess-Engine-And-Tools: Bagatur Chess Engine and Tools - Downloads and Sources](#)
- [BagaturChess download | SourceForge.net](#)
- [Chess Art for Kids - Android Apps on Google Play](#)
- [Bagatur](#) at [CCRL 40/40](#)

### Misc

- [Baghatur from Wikipedia](#)
- [Bogatyr from Wikipedia](#)

## References

1. [^](#) [EPL - Eclipse Public License - v 1.0](#)
2. [^](#) [Bagatur](#) at [CCRL 40/40](#)
3. [^](#) [GitHub - bagaturchess/Bagatur-Chess-Engine-And-Tools: Bagatur Chess Engine and Tools - Downloads and Sources](#)
4. [^](#) [Chess Art for Kids - Android Apps on Google Play](#)
5. [^](#) [GitHub - bagaturchess/Bagatur-Chess-Engine-And-Tools: Bagatur Chess Engine and Tools - Downloads and Sources](#)

## What links here?

Page

[Bagatur](#)

[Chess Art For Kids](#)

[Engines](#)

Date Edited

Sep 10, 2016

Sep 13, 2016

Mar 10, 2018

Page

[Krasimir Topchiyski](#)

Date Edited

Sep 9, 2016

[Up one Level](#)