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CHEOPS logo ^[4]

Cheops, (CHEOPS, CHEss OPponent Simulator, Χέοψ) a didactic [open source chess program](#) written by [Tristan Miller](#) in [C++](#), licensed under the [GNU GPL](#), first released in 1999, version 1.0 in 2003, and version 1.2 in February 2015 ^[1]. The program uses a [command line interface](#) to interact with the user, and prints simple [text diagrams](#) to display the current [position](#) during [game play](#). [Moves](#) are printed and [entered](#) in [pure algebraic coordinate notation](#). [Daniel José Queraltó](#) has produced a build of CHEOPS 1.2 for [Microsoft Windows](#). [Michael Yee](#) has produced an [UCI](#) compliant build of CHEOPS 1.1 ^{[2] [3]}.

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Description

Cheops uses a [64-square linear array board representation](#) and performs a [legal move generation anti-pattern](#) by looking for [from-squares](#) of own [pieces](#) traversing the board in [spiral](#) order from center to h1-edge, keeping, returning and splicing ^[5] [std::list](#) as local [move list](#) variables on the stack. The tree [search](#) is fixed [depth alpha–beta](#) without [quiescence search](#). The static [evaluation function](#) considers [material](#), [mobility](#), [center proximity](#), [king piece tropism](#), and a few [pawn structure terms](#) such as [isolated](#), [doubled](#) and [backward pawns](#) ^[6].

See also

- [CXG Sphinx](#)
- [CHEOPS](#), the Chess-Oriented Processing System from the 70s
- [Nobility](#)
- [Pharaon](#)
- [Sfinks](#)

Forum Posts

- [CHEOPS 1.2 -- An AI chess engine -- released on 2015-02-01](#) by [Tristan Miller](#), [rgcc](#), February 03, 2015
- [CHEOPS UCI Engine - missing Windows binaries](#) by [Norbert Raimund Leisner](#), [CCC](#), March 27, 2015
- [CHEOPS 1.3 -- An AI chess engine -- released on 2016-12-27](#) by [Tristan Miller](#), [rgcc](#), December 28, 2016

External Links

Chess Program

- [CHEOPS | Tristan Miller](#)
- [CHEOPS online manual](#)

Misc

- [Khufu from Wikipedia](#)
- [Great Pyramid of Giza from Wikipedia](#)
- [Project Cheops](#)
- [Cheops, Pyramid Chess](#)
- [Pyramid Chess, a three dimensional chess variant](#)

References

1. [^ CHEOPS 1.2 -- An AI chess engine -- released on 2015-02-01](#) by [Tristan Miller](#), [rgcc](#), February 03, 2015
2. [^ CHEOPS - Third-party binaries](#)
3. [^ UEL](#) by [Patrick Buchmann](#)
4. [^ CHEOPS logo](#) by [Jin Wicked](#)
5. [^ list::splice - C++ Reference](#)
6. [^ CHEOPS - nothingisreal.com](#)

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