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The [Glas Elephant](#) ^[4] in [Hamm](#) ^[5]

Elephant,

a [WinBoard](#) compatible chess engine written by [Harald Lüßen](#) in [C++](#), first released in March 2004 ^[1]. The name was chosen due to the connection with pieces in [Chaturanga](#), [Chinese Chess](#) and chess, such as [rook](#) and [bishop](#) ^[2], because [elephants](#) are known to be intelligent, and further due its author's weight ^[3].

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Description

Elephant applies [PVS alpha-beta](#) with [transposition table](#), [quiescence](#), [adaptive null move pruning](#), [IID](#), [razoring](#), [futility pruning](#) and various [extensions](#), embedded inside an [fractional ply iterative deepening](#) framework. [Move ordering](#) at the [root](#) is based on [node count](#), and otherwise considers [hash move](#) including [principle variation](#), [static exchange evaluation](#), [killer-](#) and [history heuristic](#). [Evaluation](#) might be [lazy](#) and takes [material](#), [cached pawn structure](#), [king safety](#), [piece-squares tables](#), [mobility](#) and multiple other terms into account. Elephant was used as testbed to compare various [bitboard](#) techniques in

generating [sliding piece attacks](#) ^[6], in particular [Exploding-](#) and [Sherwin Bitboards](#).

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- [Elephant Gambit](#) from Wikipedia
- [Elephant](#), the [Chinese Chess](#) engine by [Shun-Chin Hsu](#), [Shun-Shii Lin](#), [Shih-Chieh Huang](#) et al.

Misc

- [Elephant](#) from Wikipedia
- [Elephant \(disambiguation\)](#) from Wikipedia
- [Blind men and an elephant](#) - Wikipedia
- [War elephant](#) from Wikipedia
- [King Crimson](#) - [Elephant Talk](#), live on [Fridays](#) (1982), [YouTube](#) Video
lineup: [Tony Levin](#), [Adrian Belew](#), [Bill Bruford](#), [Robert Fripp](#)

References

1. [^ Elephant](#) from [WBEC Ridderkerk](#)
2. [^ Re: Elephant](#) by [Eugene Nalimov](#), [CCC](#), March 26, 2001
3. [^ Elephant 1.00, a new winboard engine](#) by [Harald Lüßen](#), [CCC](#), March 15, 2004
4. [^ The Glas Elephant](#), [Maximilianpark](#), [Hamm](#), [North Rhine-Westphalia](#), Germany, [The Industrial Heritage Trail](#)
5. [^ Elefantenparade – HammWiki](#)
6. [^ Re: BitBoard Tests Magic v Non-Rotated 32 Bits v 64 Bits](#) by [Harald Lüßen](#), [CCC](#), August 24, 2007

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