

[Home](#) * [Engines](#) * **Buzz**



[Buzz](#) playing [Twister](#) ^[4]

Buzz,

a [Chess Engine Communication Protocol](#) compliant chess engine written by [Pradu Kannan](#) in [C++](#). An early version is available as [open source engine](#) under the [GPL](#) ^[1], intended to be an example program for new chess programmers.

Buzz is a [bitboard](#) engine and applies Pradu Kannan's main stream implementation of [Magic Bitboards](#) with individual table sizes for each square, later dubbed [Fancy Magic Bitboards](#), the generator is available as open source from the Buzz site. Buzz got a 2.2 x speedup from 32-bits to 64-bits on [Core2](#) ^[2]. It uses a kind of [principal variation search](#), dubbed Node-Type Search (NTS), explicitly considering [node types](#) ^[3], and utilizes multiple [threads](#) for a [parallel search](#). In collaboration with [Andres Valverde](#) and [Fonzy Bluemers](#), Buzz' search was incorporated into the team effort [Dirty](#).

Table of Contents

[Tournaments](#)

[Photos & Games](#)

[See also](#)

[Forum Posts](#)

[External Links](#)

[Chess Engine](#)

[Misc](#)

[References](#)

[What links here?](#)

Tournaments

So far, Buzz played the first three [ACCA Americas' Computer Chess Championships](#), the [ACCA 2006](#), [ACCA 2007](#), and [ACCA 2008](#), the first two [ACCA World Computer Rapid Chess Championships](#), [WCRCC 2007](#) and [WCRCC 2008](#), as well the [CCT9](#).

Photos & Games



[ACCA 2008](#): [Bob Hyatt](#), [Charles Roberson](#), [Pradu Kannan](#), [Brian Richardson](#) and [Ted Summers](#) ^[5]

[ACCA 2008](#), [Buzz](#) - [Tinker](#) ^[6]

```
[Event "ACCA 2008"]
[Site "Internet Chess Club"]
[Date "2008.11.09"]
[Round "5"]
[White "Buzz"]
[Black "Tinker"]
[Result "1-0"]
```

```
1.e4 c5 2.Nf3 d6 3.Bb5+ Bd7 4.Bxd7+ Qxd7 5.O-O Nc6 6.c3 Nf6 7.d4 cxd4
```

8.cxd4 Nxe4 9.d5 Nd8 10.Re1 f5 11.Nc3 Nxc3 12.bxc3 Rc8 13.Qd4 Kf7
14.Qxa7 Rxc3 15.Qd4 Rc7 16.Be3 Rc8 17.Rac1 Kg8 18.Rxc8 Qxc8 19.Qa4 Nf7
20.Rc1 Qd8 21.Nd4 Ne5 22.Ne6 Qb8 23.Rc7 Ng6 24.Bd4 h6 25.Qd7 Qa8 26.Nxf8
1-0

See also

- [Arthropod](#)
- [Dirty](#)
- [Magic Bitboards](#)
- [Wasp](#)
- [Witz](#)

Forum Posts

- [Handling 3-rep/50-move in hash tables](#) by [Pradu Kannan](#), [Winboard Forum](#), February 19, 2007 » [Repetitions](#), [Transposition Table](#)
- [Re: Speedup with bitboards on 64-bit CPUs](#) by [Pradu Kannan](#), [CCC](#), April 27, 2007
- [Compiling for Unix](#) by [Pradu Kannan](#), [Winboard Forum](#), May 08, 2007 » [Unix](#)
- [Slight enhancement to PVS](#) by [Pradu Kannan](#), [Winboard Forum](#), June 10, 2007 » [Principal Variation Search](#), [Node Types](#)
- [Re: multithreading questions](#) by [Pradu Kannan](#), [CCC](#), August 08, 2007 » [Thread](#)
- [A Few General Questions on Parallel Search](#) by [Pradu Kannan](#), [Winboard Forum](#), August 31, 2007 » [Parallel Search](#)
- [Re: Adjusting weights the Deep Blue way](#) by [Pradu Kannan](#), [Winboard Forum](#), September 01, 2008

External Links

Chess Engine

- [Buzz - A Winboard Chess Engine](#)
- [Buzz](#) from [WBEC Ridderkerk](#)
- [Buzz 0.08 64-bit](#) in [CCRL 40/4](#)
- [Buzz 0.08 32-bit](#) in [CCRL 40/40](#)

Misc

- [Buzz \(mascot\) from Wikipedia](#)
- [Salt Lake Bees from Wikipedia](#)
- [Category:Buzz \(mascot\) - Wikimedia Commons](#)
- [Yellow jacket from Wikipedia](#)

- [Buzz \(disambiguation\) from Wikipedia](#)
[Buzz cut from Wikipedia](#)
- [The Buzz \(disambiguation\) from Wikipedia](#)
- [Buzzer from Wikipedia](#)
- [Shocking Blue](#) - [Love Buzz](#), [YouTube](#) Video

References

1. [^](#) [Buzz - A Winboard Chess Engine](#)
2. [^](#) [Re: Speedup with bitboards on 64-bit CPUs](#) by [Pradu Kannan](#), [CCC](#), April 27, 2007
3. [^](#) [Slight enhancement to PVS](#) by [Pradu Kannan](#), [Winboard Forum](#), June 10, 2007
4. [^](#) [Buzz](#), a stylized [yellowjacket](#) as official mascot of the [Georgia Institute of Technology](#)
5. [^](#) [The 2008 Third Annual ACCA Americas' Computer Chess Chamionships](#) Site Pics from [UAB](#) »
[ACCA Americas' Computer Chess Championship](#), [ACCA 2008](#)
6. [^](#) [The 2008 Third Annual ACCA Americas' Computer Chess Championships - Results](#)

What links here?

Page	Date Edited
ACCA 2006	Jul 14, 2014
ACCA 2007	Jul 14, 2014
ACCA 2008	Jul 14, 2014
Alaric	Mar 4, 2014
Andres Valverde	Apr 6, 2013
Buzz	Jun 22, 2016
CCT9	Aug 25, 2013
Christopher Conkie	May 17, 2016
Dirty	Nov 14, 2017
Engines	Mar 10, 2018
Georgia Institute of Technology	Nov 14, 2017
Homer	Dec 23, 2013
Matilde	Jan 1, 2014
Pradu Kannan	Aug 3, 2015
Symbolic	May 8, 2017
Unix	Jun 28, 2015
Wasp	Nov 24, 2017
WCRCC 2007	Nov 21, 2016
WCRCC 2008	Nov 21, 2016
Witz	Nov 14, 2017

[Up one level](#)