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Deep Blue,
the [IBM](#) sponsored successor of the
chess entity [Deep Thought](#).

The project was initially started
1985 as [ChipTest](#) at [Carnegie
Mellon University](#) by the computer
science doctoral students [Feng-
hsiung Hsu](#) and [Thomas
Anantharaman](#). [Murray Campbell](#),
former co-developer of [HiTech](#),
joined the ChipTest team a few
months later. The program was
named **Deep Thought** after the
fictional computer of the same
name from [The Hitchhiker's Guide
to the Galaxy](#). Hsu and Campbell
joined IBM in 1989, Deep Blue
was developed out of this. The
name is a play on Deep Thought
and [Big Blue](#), IBM's nickname.
The declared target was to become
the strongest chess entity ever and
to beat the human world champion.

Deep blue chip ^{III}

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WCCC 1995

Deep Blue Prototype missed the expected win at the [WCCC 1995](#) by losing the [decisive match](#) in round 5 against [Fritz](#) after king castling into Fritz's half open g-file. Description given in 1995 from the [ICGA](#) site [\[4\]](#):

Deep Blue Prototype consists of an IBM RS/6000 workstation with 14 chess search engines as slave processors. Each processor contains a VLSI chip for move generation, as well as additional hardware for search and evaluation. Each Deep Thought 2 processor searches about 500,000 positions per second standalone, or about 400,000 positions per second as a slave processor. (This is about 1/10th of the projected speed of the Deep Blue single-processor currently in fabrication.) The 14- processor Deep Thought 2 typically searches between 3 and 5 million positions per second. When conducting a search, the search tree near the root position is processed on the host workstation, and includes selective search extension algorithms such as singular extensions. The deepest nodes in the search tree are handled by the slave search engines which usually do 4-ply alpha-beta searches.

Kasparov versus Deep Blue

Main article: [Kasparov versus Deep Blue 1996](#)

Deep Blue was the first machine to win a chess game against a reigning world champion [Garry Kasparov](#) under regular time controls. This first win occurred on February 10, 1996, Game 1. However, Kasparov won three games and drew two of the following games, beating Deep Blue by a score of 4–2.

The Rematch

Main article: [Kasparov versus Deep Blue 1997](#)

In 1997 Deep Blue won the rematch against Kasparov. He did not recover after the shock by Deep Blues' play in [game 2](#). Kasparov resigned a drawn position, since he missed a deep tricky perpetual check, while he wrongly was confident the machine would not have blundered to allow him to draw. In the final decisive [game 6](#) Kasparov was rather indisposed and blundered in the early opening.

The Deep Blue Team

- [Feng-hsiung Hsu](#) - The man who started the Deep Blue project while still in college
- [Murray Campbell](#) - A former chess champion who works with Deep Blue's evaluation function
- [A. Joseph Hoane](#) - Deep Blue's software engineer
- C. J. Tan - Senior manager of the Deep Blue development team
- [Jerry Brody](#) - The project's support engineer
- [Joel Benjamin](#) - development team chess consultant, opening book author

Photos

The core Deep Blue team, [Joe Hoane](#), [Feng-hsiung Hsu](#), and [Murray Campbell](#) ^[3]

See also

- [Computer Chess - A Movie](#)
- [The Machine](#)

Selected Publications

1995 ...

- [Feng-hsiung Hsu](#), [Murray Campbell](#), [Joe Hoane](#) (1995). *Deep Blue System Overview*. International Conference on Supercomputing, pp. 240-244.

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- [DB Tweaking Between Games](#) by [Mike Gherrity](#), [rgcc](#), May 13, 1997
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- [4 hours video: B Larsen met Deep Blue in 1993 in Copenhagen](#) by [Jens Bæk Nielsen](#), [CCC](#), June

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- [New Pictures from Kasparov vs. Deep Blue](#) by [Steve Maughan](#), [CCC](#), February 10, 2016 ^[9]
- [Hash Tables Deep Blue](#) by Gustavo Mallada, [CCC](#), May 18, 2017 » [Transposition Table](#)

External Links

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- [Deep Blue Prototype ICGA Tournaments](#)
- [IBM research: The making of Deep Blue](#)
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- [Komodo 8: Deep Blue revisited \(part one\)](#) by [Albert Silver](#), [ChessBase News](#), December 26, 2014 » [Komodo, Kasparov versus Deep Blue 1997](#) ^[11]
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