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TechMate Screen [\[6\]](#) [\[7\]](#)

TechMate, (TechMate Chess) a commercial chess program for the [Atari ST](#) by [Alexander](#) and [Barbara Szabo](#), produced and market by their own company [Szabo Software](#) since 1986 [\[1\]](#), and distributed also through third party vendors like *MichTron Corp.* [\[2\]](#) [\[3\]](#) in the US, and [Microdeal](#) [\[4\]](#) and *Software Direct* [\[5\]](#) in the UK. TechMate has an own [GUI](#) with [2D Graphics Board](#) and [entering moves](#) completely [mouse-driven](#).

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Description

TechMate was derived from [Tech 3](#), Alex Szabo's 1984 thesis program written in [Fortran](#) and [IBM 370 Assembly](#) to run on an [Amdahl 470V/8](#) of the [University of British Columbia](#). Tech 3 was developed in the spirit of the original [Tech](#) program by [James Gillogly](#), with [knowledge](#) applied at the top of the [search tree](#) as positional presort rather than at the [leaf nodes](#) using complex [evaluation](#) [\[8\]](#).

MateTech performed an [alpha-beta search](#) with [quiescence](#) and [iterative deepening](#) with [aspiration windows](#) , using a [transposition table](#) with [Zobrist hashing](#). The pure [material](#) based rudimentary [evaluation](#) of Tech 3 was extended by a strategic component [\[9\]](#).

The Technology Curve

As published in their 1988 [ICCA Journal](#) paper ^[10], Alex and Barbara Szabo revisited the [technology curve](#) by playing 6882 games between copies of TechMate set at different time rates, with the conclusion that the advantage of improved technology rapidly decreases when machines and algorithms become more powerful. [Ernst A. Heinz](#) in his self-play memo on the experiment of the Szabos ^[11]:

The Szabos determined the technology curve of their chess program TechMate that self-played 6,882 games on two Atari ST computers. The number of games per match between longer and shorter searching versions of the program varied strongly from a minimum of 32 to a maximum of 1367. The gain in playing strength averaged at 156 rating points per doubling of available search time (computing power). The experimental data indicated slight [diminishing returns](#) at longer search times. However, the Szabos simply did not play enough games at long times to draw reliable conclusions.

Publications

- [Gregg Pearlman](#) (1986). [ST New Products](#). [Antic Vol. 5, No. 8](#)
- [Gigi Bisson](#) (1986). [STart Buyer's Guide](#). [STart, Vol. 1 No. 3](#)
- [Harvey Bernstein](#) (1987). [Entertainment - Strategy, adventure, shoot-em-ups, chess and simulations](#). [STart Special Issue Number 1](#)
- [Christopher Chabris](#) (1987). [Reviews: The Game of Kings - START's First Chess Tournament](#). [STart Vol. 2, No. 2](#)
- [Alexander Szabo](#), [Barbara Szabo](#) (1988). *The Technology Curve Revisited*. [ICCA Journal](#), Vol. 11, No. 1

External Links

- [Atari ST Techmate Chess](#)
- [TechMate Chess for Atari ST](#) - The [Video Games Museum](#)

References

1. [^] [Gregg Pearlman](#) (1986). [ST New Products](#). [Antic Vol. 5, No. 8](#)
2. [^] [MichTron Corp.](#) from [MobyGames](#)
3. [^] [Atari ST Techmate Chess | MichTron](#)
4. [^] [Atari ST Techmate Chess | Microdeal](#)
5. [^] [Atari ST Techmate Chess | Software Direct](#)
6. [^] [TechMate Chess for Atari ST](#) - The [Video Games Museum](#)

7. [^ Christopher Chabris \(1987\). Reviews: The Game of Kings - START's First Chess Tournament. SStart Vol. 2, No. 2](#)
8. [^ Alexander Szabo \(1984\). Computer-Chess Tactics and Strategy. M.Sc. Thesis, University of British Columbia](#)
9. [^ Alexander Szabo, Barbara Szabo \(1988\). *The Technology Curve Revisited.* ICCA Journal, Vol. 11, No. 1](#)
10. [^ Alexander Szabo, Barbara Szabo \(1988\). *The Technology Curve Revisited.* ICCA Journal, Vol. 11, No. 1](#)
11. [^ Ernst A. Heinz \(2000\). *A New Self-Play Experiment in Computer Chess.* Massachusetts Institute of Technology, Laboratory of Computer Science, Technical Memo No. 608, \[zipped ps\]\(#\), \[pdf\]\(#\)](#)

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