

[https://en.wikipedia.org/wiki/Sargon\\_\(chess\)](https://en.wikipedia.org/wiki/Sargon_(chess))

The original **SARGON** was written by Dan and Kathleen 'Kathe' Spracklen in a Z80-based computer called Wavemate Jupiter III using assembly language through TDL Macro Assembler.

The name was originally written entirely in capitals because early computer operating systems such as CP/M did not support lowercase file names.



The notation screen from *Sargon I*

**SARGON** was introduced at the 1978 West Coast Computer Faire where it won the first computer chess tournament held strictly for microcomputers, with a score of 5-0. This success encouraged the authors to seek financial income by selling the program directly to customers. Since magnetic media were not widely available at the time, the authors placed an advert in *Byte* magazine selling for \$15 photocopied listings that would work in any Z80-based microcomputer. Availability of the source code allowed porting to other machines. For example, the March–April 1979 issue of *Recreational Computing* describes a project that converted Sargon to an 8080 program by using macros. Later the Spracklens were contacted by Hayden Books and a book was published.

When magnetic media publishing became widely available, a US Navy petty officer, Paul Lohnes, ported *Sargon* to the TRS-80, altering the graphics, input, and housekeeping routines but leaving the Spracklen's chess-playing algorithm intact. Paul consulted with the Spracklens, who were both living in San Diego at the time, to make the TRS-80 version an instant success with the help of Hayden Book's newly established software division: Hayden Software. Paul was not involved in further refinements to the TRS-80 version due to his reassignment to sea duty shortly after signing the deal with Hayden Software.

In the early 1980s, SARGON CHESS was ported to several other early microcomputers, including the Nascom (by Bits & PCs, 1981), Exidy Sorcerer, and Sharp MZ 80K. A complete rewrite was necessary later for the Apple II port, made by Kathleen's brother Gary Shannon. Both were published by Hayden Software.

The Spracklens made significant improvements on the original program and released **Sargon II**. In 1978 it tied for third at the ninth North American Computer Chess Championship despite being seeded ninth of 12 entries. *Sargon* finished only behind Belle and Chess 4.7, and defeated AWIT—running on a \$5 million Amdahl mainframe—amazing the audience.

That year they published a series of articles in *BYTE* on computer chess programming, stating "we think it would be nice if not everyone had to reinvent the wheel".

**Sargon II** was ported to a variety of personal computers popular in the early 1980s. *Apple II, Atari 8-bit, Commodore VIC-20, Commodore 64, TRS-80*

The game engine featured multiple levels of lookahead to make it more accessible to beginning chess players. *BYTE* in 1980 estimated that *Sargon II* had a 1500 rating at the highest tournament-time difficulty level, and speculated that it was the best chess program on sale, including dedicated devices.

**Sargon 2.5**, sold as a ROM module for the Chafitz Modular Game System, **was identical to Sargon II** but incorporated pondering. It received a 1641 rating at the Paul Masson tournament in June–July 1979, and 1736 at the San Jose City College Open in January 1980.

**Sargon 3.0** finished in seventh place at the October 1979 North American Computer Chess Championship. The competition had improved, but 3.0 drew against Cray Blitz and easily defeated *Mychess*, its main microcomputer rival. In December, 3.0 easily won the second microcomputer championship in London.

*Sargon III* was a complete rewrite from scratch. Instead of an *exchange evaluator*, this version used a *capture search* algorithm. Also included was a chess opening repertoire. This third version was written originally for the 6502 assembler and was commercially published by Hayden Software in 1983. Apple contacted the Spracklens and, after a port for 68000 assembly, *Sargon III* was the first third-party executable software for the Macintosh.

Apple II, Amiga, Atari 8-bit, Atari ST, Commodore 64, Macintosh, PC.

[http://www.schaakcomputers.nl/hein\\_veldhuis/database/files/07-1984,%20Rochade,%20Martin%20Gittel,%20Schach%20auf%20dem%20Personal-Computer%20mit%20Sargon%20III.pdf](http://www.schaakcomputers.nl/hein_veldhuis/database/files/07-1984,%20Rochade,%20Martin%20Gittel,%20Schach%20auf%20dem%20Personal-Computer%20mit%20Sargon%20III.pdf)

After the demise of Hayden Software, later chess programs were also released under the name *Sargon*, including **Sargon IV** (Spinnaker Software) written for Macintosh and PC.

**Sargon V** (Activision) and a **CD-i** title simply **named Sargon Chess** was written for Macintosh, PC, Philips CD-i

The Spracklens concurrently wrote the engines for the dedicated chess computers produced by Fidelity Electronics, which won the first four World Microcomputer Chess Championships.