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Alex and Margaret Bell 1965 ^[2]

Alex G. Bell,

a British computer scientist and early computer chess and [game](#) programmer from [Manchester University](#) and [Atlas Computer Laboratory](#). Bell started chess and games programming in the early 60s, initially working for [Nils Barricelli](#) and his chess program for [symbio-organisms](#) research. He also wrote his own programs for [Kalah](#) and Chess, which was called [Atlas](#).

Alex Bell published various papers about those topics, his 1972 book *Games Playing with Computers* is a real quarry and covers a broad range of basic AI-algorithms and games. Fortunately, thanks to the [Rutherford Appleton Laboratory \(RAL\)](#) archive, it is available online ^[1], as well as other valuable resources quoted here in the chess programming wiki.

In the 70s Atlas evolved to [Master](#) in collaboration with [Peter Kent](#), [John Birmingham](#) and chess expert [John Waldron](#). Alex Bell was further involved to establish [computer chess conferences](#) .

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[Chess](#) on the [360/195](#). Alex Bell, Geoff Lambert, [Peter Kent](#), [John Birmingham](#) and [John Waldron](#) ^[3]

Atlas

In 1962, when Bell was at [Manchester University](#), [Nils Barricelli](#) arrived there with the intention to write a chess program for the [Atlas Computer](#), which would be used to study certain theories of [evolution](#). Alex Bell was hired by [Atlas Computer Laboratory](#) at [Chilton site, Oxfordshire](#) for the purpose to write a list legal moves generator for Barricelli's project. Bell later reproduced the Barricelli chess program in [Algol](#) with quite a good user interface.

Master

When Alex Bell left Atlas Laboratory in 1969, his fellow [Peter Kent](#) took over his code. In 1973 after Alex' return, he joined forces with Peter and [John Birmingham](#) from [Harwell](#) to work on the chess playing program [Master](#) (**M**inimax **a**lgorithm **T**ester), which competed at the [First World Computer Chess Championship 1974](#) in Stockholm ^[4]. Alex left Chilton a second time and moved to [CSIRO](#) in [Canberra](#) in

1975, and [Master](#) played the following [World Computer Chess Championships](#), [WCCC 1977](#) and [WCCC 1980](#) with Peter Kent and John Birmingham as sole authors ^[5].

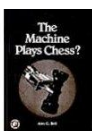
Computer Chess Conferences

Alex Bell was initiator and co-organizer of the two first computer chess conferences in 1973 and 1975, while the latter became the [Advances in Computer Chess 1](#) conference ^[6].

Selected Publications

^[7]

- [Alex Bell](#) (1968). [Kalah on Atlas](#). [Literature: Reports](#) hosted by [Atlas Computer Laboratory](#)
- [Alex Bell](#) (1970). *How to program a computer to play legal chess*, [The Computer Journal](#), May 1970
- [Alex Bell](#) (1970). [Partitioning Integers in N dimensions](#), [The Computer Journal](#), Vol. 13, No. 3, pp. 278-83
- [Alex Bell](#) (1972). [Games Playing with Computers](#). [Allen & Unwin](#), [index](#)
- [Alex Bell](#) (1973). [Himmelbett](#). [The Computer Journal](#), Vol. 16, No. 3, [Literature: Reports](#) hosted by [Atlas Computer Laboratory](#)
- [Alex Bell](#) (ed.) (1973). *Computer Chess*. Proceedings [May 1973 Meeting on chess playing by computer](#). Science Research Council, [Atlas Computer Laboratory](#)
- [Alex Bell](#) (1978). *The Machine Plays Chess*. [Pergamon Press](#), from [amazon](#)



- [Alex Bell](#), N. Jacobi (1979). [How to read, make and store chess moves](#). [The Computer Journal](#) Vol. 22, No. 1, 71-75
- [Alex Bell](#) (1983). [Chess for three gives the White Knight a winning gambit](#). [The Micro User Magazine](#), December 1983 » [White Knight](#)

External Links

- [Alex Bell](#) from [Atlas Computer Laboratory](#), hosted by [Rutherford Appleton Laboratory \(RAL\)](#)

References

1. [^] [Games Playing with Computers](#)
2. [^] [Alex Bell](#) from [Atlas Computer Laboratory](#), hosted by [Rutherford Appleton Laboratory \(RAL\)](#)

3. [^ Slide 28: 23.08.74 to 01.11.74](#) from [Rutherford's](#) Photographic Section for the [Atlas Computer Laboratory](#)
4. [^ Alex Bell \(1978\). MASTER at IFIPS.](#) from [Atlas Computer Laboratory](#), hosted by [Rutherford Appleton Laboratory \(RAL\)](#), excerpt from Alex Bell (1978). *The Machine Plays Chess*. [Pergamon Press](#), from [amazon](#)
5. [^ Master's ICGA Tournaments](#)
6. [^ 1975 Press Releases - Techniques for playing the end game](#) from [Atlas Computer Laboratory](#), hosted by [Rutherford Appleton Laboratory \(RAL\)](#)
7. [^ Games Playing with Computers - References](#)

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