

# Quantum Computers (Abstract)

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In this research paper, the general concept of quantum computers and their use of quantum phenomena is explained. What is a quantum logic gate, how they are used, and which are most common is also described in this research paper, albeit not in high mathematical detail?

Some quantum computer history, starting from the year 1980, is also described in this research paper. The important Shor's algorithm and Grover's algorithm, two very famous quantum algorithms with real world uses, are also explained. After some quantum algorithms have been explained, the research paper consists of looking at the practical effects and implementations of quantum computers now, and in the future.

At the time of writing of this research paper, quantum computers have not yet seen any mainstream use, and they are speculated not to for at least the next 10 or more years. The future, however, is looking very good for them, as they will be useful to practically every scientific field with their ability to process massive amounts of data in short amounts of time.