# Quantum Computing

Pioneering the Future of Technology

**Ashwini Kumar Rath** 

Founder and CEO



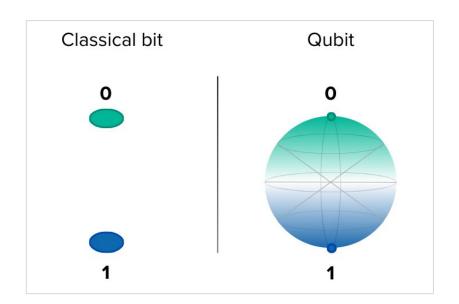
### Quantum Computing Key Concepts

Quantum computing harnesses principles of quantum mechanics for computations far beyond classical computers.



Superposition

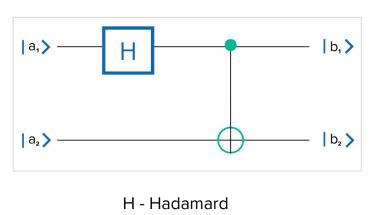
• Entanglement





## How Quantum Computing Works?

**Quantum Gates** Manipulate qubits' states Utilize superposition and Quantum Algorithms entanglement → Shor's Algorithm Factors large numbers Grover's Algorithm Speeds up database searches **Quantum Circuit** Sequence of quantum gates







### Potential Applications

**Cryptography**: Quantum Key Distribution (QKD)



**Material Science**: Quantum simulations for battery materials



**Optimization Problems**: Supply chain logistics optimization



Artificial Intelligence: Accelerating machine learning training



### Quantum Cryptography and Batoi's Work





### **Current State of Quantum Computing**

#### **Major Players**

IBM, Google, Microsoft.

#### Challenges

Error rates, Qubit coherence, Scalability.

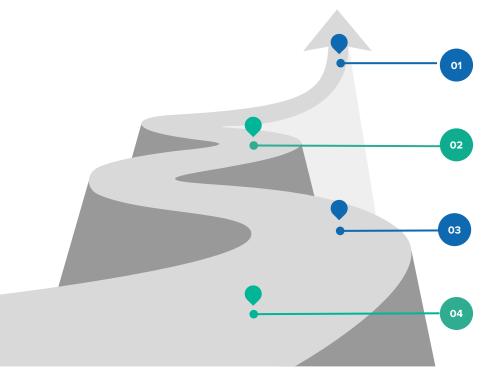
#### **Recent Milestones**

Quantum supremacy, Advancements in quantum processors.





### The Future of Quantum Computing



Infrastructure Development: Investment in labs and facilities.

Talent Development: Training programs and scholarships.

Collaborative Ecosystem: Partnerships and collaborations.

Policy Framework: Supportive regulations.



### **Thank You**

For more information, please contact us; <a href="https://www.batoi.com">www.batoi.com</a>

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www.ashwinirath.com

