

## Handout 1



1. To you, what is a computer?
2. To you, what is a quantum computer?
3. How do we represent information?
4. Outline of quantum computing topics

### **Qiskit**

- a. Single systems
- b. Multiple systems
- c. Quantum circuits
- d. Entanglement in action

### **Quantum Computing** Chuang

- a. Fundamental concepts
- b. Quantum computation
- c. Quantum information

## 5. Internships

- a. Microsoft



- b. Google



- c. IBM



## 6. Textbooks

- a. Quantum Computation and Quantum Information - *Nielsen and Chuang* 10th ed. Cambridge

## 7. People

- a. Bruce Krayenhoff - 1Qbit

- b. Daniel Varoli - Zapata Computing
  - c. Enrique Martin - Quantinuum
- 8. Companies
  - a. Microsoft
  - b. Google
  - c. D-Wave
- 9. Next steps
  - a. Research quantum computing online for 20 minutes
  - b. Learn about a problem that could be more easily solved with quantum computing