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An Introduction to Quantum Computing - Teaching the Basics

Quantum computing, a field that started gaining increased traction around 2016, uses quantum mechanics principles from around 1900 to compute with quantum phenomena rather than the random simulations of classical computers. This interactive presentation introduces quantum computing to people without a background in computing or quantum mechanics. It compares classical logic gates and circuits to quantum ones to build understanding. The session covers set theory and probability as steps toward quantum states and Bloch spheres. It ends with quantum circuits and simple algorithms, using hands-on examples to demystify quantum computing, allowing attendees to grasp its core principles and potential.

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