



Dave Bacon



Quantum computers will be able to solve problems that a classical computer can't, such as figure out complex molecular structures. This **quantum advantage**, or sometimes called "the beyond classical experiment" limit is called quantum supremacy or "the beyond classical experiment", and was first shown by Google with superconducting qubits in 2019. While the complex problem that Google solved was not extremely interesting—they showed they could perform complicated computational operations in 200 seconds that would have taken a supercomputer 10,000 years to complete—it was a huge step forward in quantum computing. Dave Bacon was part of the team that achieved quantum supremacy and is now the head of software development for Google's quantum computer team. He works hard to figure out things like "what kind of programming language do you write a quantum computer in?" and other key software questions. Without Bacon and his team, there would be no way to send computer code to the quantum computer to solve these complex problems.