



Title



The first computers filled up entire rooms, and today they are small enough to fit in your pocket. How small could you make a computer—could you make a computer out of individual atoms? One Australian scientist is doing just that. Michelle Simmons works towards building atomic-scale devices: **transistors**, conducting wires, and other 3D electronics. She must carefully control individual atoms to perfect the devices down to the atomic scale. This level of precision also allows them to create qubits out of silicon quantum dots. In fact, Simmons was the first to perform a **quantum gate** on two qubits made of silicon. Simmons and her company hope to eventually fit millions of these small qubits into a single device to make a powerful quantum processor.