



## Uses of Quantum Computing



While we don't expect quantum computers to take over all of the uses of **classical computers** (like our phones, laptops, and video game consoles), we do anticipate that quantum computers will greatly improve our lives in many ways. Quantum computers will be able to stop hackers from getting information by making **encryption** of digital information more secure, allow engineers to discover new materials for making better batteries, solve traffic and scheduling problems more efficiently, give meteorologists the ability to better predict the weather and improve current models of climate change, assist doctors to find new medicines, and even help farmers by identifying new fertilizer compounds for their crops! Quantum computers will be able to solve cumbersome problems that even the supercomputers of today struggle to solve.