

# 'The best piece of legislation' in DC is about quantum computing



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**C4ISRNET (<https://www.c4isrnet.com/it-networks/2018/07/23/the-best-piece-of-legislation-in-dc-is-about-quantum-computing/>)**

A Texas congressman warned of the growing threat quantum computing presents if competitors such as Russia or China achieve the technological feat first.

Speaking July 20 at the Aspen Security Forum in Aspen, Colorado, Rep. Will Hurd, R-Texas, said "whoever gets to true quantum computing first will be able to negate all the encryption that we've ever done to date. That is why China, that is why Russia is sucking up ciphertext."

Ciphertext, he explained, is encrypted data that cannot be read without the proper cryptogram code. Despite the fact these nations can't read the data because they don't have the decryption keys, once they achieve quantum, they'll be able to break it and read everything they've accumulated.

"Quantum is going to get us to a point where we're going to have to rethink encryption," Hurd said.

Top intelligence officials have been warning of advancements in quantum for some time with varied alarm. Earlier this month, the Pentagon reorganized its leadership structure to emphasize a series of emerging technologies, including quantum science. In addition, the Department of Energy plans to invest more than \$100 million toward quantum computing research, according to the president's budget request for fiscal year 2019.

Hurd serves as the chairman of the House oversight and reform IT subcommittee. In his view, the race for the technology is tied between the United States and Russia, though other federal leaders have noted the United States still leads.

To push ahead and maintain an advantage, Hurd advocated for a national coordinator for quantum computing within the White House. This coordinator would be on par with what the government did with nanotechnology 15 years ago, eventually leading the way for industry and being a champion in that space.

Hurd highlighted a proposal in Congress that would enact quantum coordination in the federal government.

"That is probably the best piece of legislation right now in Washington," he said, "Ultimately we need an increase in basic science happening in the federal government."

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