

POST

Whoah . . .

December 5, 2020

Bloomberg: Chinese announce they've built a quantum computer 10 billion times faster than Google's quantum computer that achieved Quantum Supremacy ... 100 trillion times faster than the world's fastest supercomputer

100 trillion times faster than the world's fastest super computer ...

Chinese announce new quantum computing breakthrough (see article below).



--- "Nature . . . quantum.

Computer , , , quantum.

Computing nature . . . quantum."

- Jed Anderson, Creator, EnviroAI

Bloomberg

Technology

Chinese Scientists Claim Breakthrough in Quantum Computing Race

By

Shiyin Chen (http://r20.rs6.net/tn.jsp?f=001wdjqPmYjZ74Ma9nl7LBBxNq31fcIYW4d6Ad-XnG1YnF5lbvdqxlqxLdEqM4HfrR32JF8Qukon1sREde6mUagnBNoglXp3umYvKosYiCWFu5J2cM_UK15xov2HdXchRl13uQPJ4nwb1Fgu6JeomPLYs1thg3NMtXfqSUBHRHVa5YTVJuaQDhHSv2nUeDu4e-l&c=&ch=)

December 3, 2020, 9:05 PM CST

- Race toward radical leaps in computing power heating up
- Another front in the wide-ranging U.S.-China tech contest

Chinese scientists claim to have built a quantum computer that is able to perform certain computations nearly 100 trillion times faster than the world's most advanced supercomputer, representing the first milestone in the country's efforts to develop the technology.

The researchers have built a quantum computer prototype that is able to detect up to 76 photons through Gaussian boson sampling, a standard simulation algorithm, the state-run Xinhua news agency said, citing research published (http://r20.rs6.net/tn.jsp?f=001wdjqPmYjZ74Ma9nl7LBBxNq31fcIYW4d6Ad-XnG1YnF5lbvdqxlqxLdEqM4HfrR3Sxft9DxoarYRHINF_ahUGLgygH-c-tMS9uIyhgDEZsoIRjLj-O2wdRPzBcL5xuTP9NtPfDSnMTLXktaS3F3em5De7X37JKCThJqvoHjA6412hMcJlk7cCdK94YS9KlII3jI9V6RcJRUxoXvYpQKQ-9mn7fu5Suul&c=&ch=) in Science magazine. That's exponentially faster than existing supercomputers (http://r20.rs6.net/tn.jsp?f=001wdjqPmYjZ74Ma9nl7LBBxNq31fcIYW4d6Ad-XnG1YnF5lbvdqxlqxLdEqM4HfrR3ftZDKqINLcbItzs1UrVrwo9Y4CpnQJtZtGXc8R1JMysi164_29zsF-eKssDFaN_JVCxaYocWVvKH7yHvsSe1wJCoScWm2FI2DpJ2oel5bDaoNJMPa2qWWwhx3lr2f1uqi5SAU54Ez6tUGAXowZn85gCciTv5TtTsX95vHbo-dRmMMr5IxfUkmhs-GKxqKo2m58RS7Q2Cv1es=&c=&ch=).

The breakthrough represents a quantum computational advantage, also known as quantum supremacy, in which no traditional computer can perform the same task in a reasonable amount of time and is unlikely to be overturned by algorithmic or hardware improvements, according to the research.

While still in its infancy, quantum computing is seen as the key to radically improving the processing speed and power of computers, enabling them to simulate large systems and drive advances in physics, chemistry and other fields. Chinese researchers are competing against major U.S. corporations from Alphabet Inc.'s Google to Amazon.com Inc. and Microsoft Corp. for a lead in the technology, which has become yet another front in the U.S.-China tech race.

Google said last year it has built a computer that could perform a computation in 200 seconds that would take the fastest supercomputers about 10,000 years, reaching ([Xi Jinping's government is building \(](http://r20.rs6.net/tn.jsp?f=001wdjqPmYjZ74Ma9nl7LBBxNq31fcIYW4d6Ad-XnG1YnF5lbvdqxlqxLdEqM4HfrR3jSYH8ONswrXNmNqX4tczoZaQU-TFHfRurb-9V9CCwNNrGJnSK7aIJrknfm36lNViFivJiIgDF7rsVRpiO1TOyNa1-K_ofrLBxNXcDgAUsZl5Tqp5wc7RFoZO4HvSIUohiBd9ha963UWnbnPq9Q-vL8CldpZDVGZaqW7Qtqy3zmMCR-FYoOTncPFk61yUpfvRFaDoVdFXF4=&c=&ch=) quantum supremacy. The Chinese researchers claim their new prototype is able to process 10 billion times faster than Google's prototype, according to the Xinhua report.</p></div><div data-bbox=)

Licensed [CC-BY-4.0](https://creativecommons.org/licenses/by/4.0/) (https://creativecommons.org/licenses/by/4.0/).

Original source: Constant Contact campaign

Markdown source: <https://jedanderson.org/posts/whoah.md> (https://jedanderson.org/posts/whoah.md).

Source on GitHub: [/src/content/posts/whoah.md](https://github.com/jedanderson432/jedanderson-site/blob/main/src/content/posts/whoah.md) (<https://github.com/jedanderson432/jedanderson-site/blob/main/src/content/posts/whoah.md>)