

Why Microsoft wants to design a system that stores data in DNA

DNA is emerging as an [ultra-compact way of storing it all](#), and now researchers supported by Microsoft have created the first system that can automatically translate digital information into genetic code and retrieve it again.

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[DNA] is so compact it could [shrink a data center](#) to the size of a few dice. But for that to become practical we need a DNA-based equivalent of a hard drive that lets you upload and download data in a simple and intuitive way.

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So the researchers designed a desktop-sized device that carries out the entire process automatically. First, software converts digital data into the four DNA bases—the letters A, T, C, and G.

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The device then adds the required chemicals to a synthesizer to build the snippet of DNA and then stores it in a special vessel. When it's time to read the data back out again, microfluidic pumps push the sample into a sequencer, where the genetic code is read before the software converts it back into 1s and 0s.

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The technology isn't going to replace silicon computers anytime soon, but could be used to carry out computation at a molecular level.

Read full, original post: [Microsoft Is Building an All-In-One DNA Data Storage Device](#)