

AI can reliably predict Alzheimer's by analyzing how we use words

A team from IBM and Pfizer says it has trained AI models to [spot early signs of \[Alzheimer's, a\] notoriously stealthy illness](#), by looking at linguistic patterns in word usage.

Other researchers have already trained various models to look for signs of cognitive impairments, including Alzheimer's, by using different types of data, such as [brain scans](#) and clinical test results. But the latest work stands out because it used historical information from the multigenerational [Framingham Heart Study](#), which has been tracking the health of more than 14,000 people from three generations since 1948. If the new models' ability to pick up trends in such data holds up in forward-looking studies of bigger and more diverse populations, researchers say they could predict the development of Alzheimer's a number of years before symptoms become severe enough for typical diagnostic methods to pick up.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

IBM says its main AI model was able to detect linguistic features that are sometimes related to early signs of cognitive impairment. They include certain misspellings, repeated words and the use of simplified phrases rather than grammatically complex sentences... The main model achieved 70 percent accuracy in predicting which of the Framingham participants eventually developed dementia associated with Alzheimer's disease before the age of 85.

[Read the original post](#)