

NEURALINK

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Elon Musk launched the American neurotechnology development company Neuralink, which specializes in the development and production of implantable neuro computer interfaces. Neuralink creates neurochips with the goal of treating illnesses of the CNS (central nervous system) and long-term human improvement. As no surgeon can physically introduce electrodes into the brain due to their small size, the business has built a special robot that does so. Elon Musk claims that the procedure to implant a chip in the brain will just take an hour, and patients will be able to leave the hospital on their own the day after the procedure. The chip is superior in terms of functionality and communication.



According to Elon Musk's theory, this hybridization would produce a form of human intelligence that is superior to AI. Consequently, human-free choice would be maintained. Neuralink's brain implants would make this sort of hybridization possible. In addition to receiving a lot of attention, Musk's presentation garnered criticism, particularly from the international scientific community.

The 2020 presentation featuring three pigs has so far been the most popular. The first pig was a typical pig, the second pig had a chip in it, and the third pig had a link chip removed from it. They were able to forecast the motions of each pig joint through the monitoring, modelling, and computer processing of brain signals; real-time diagrams of joint movements and predicted diagrams were shown, and their difference was extremely slight.

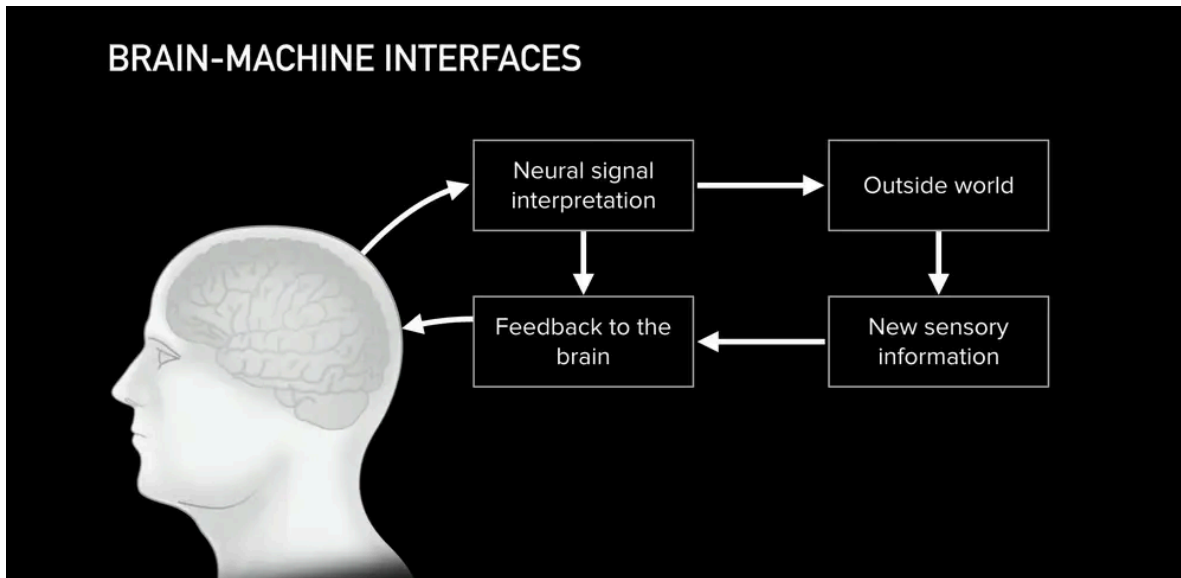


FIGURE 1: Brain-Machine Interface

This technology can be used to assist people with different types of physical disabilities. For instance, to control an exoskeleton for walking, a neuroprosthesis for communicating with people who are only partially conscious, or those who have total locked-in syndrome (LIS). The health sector is where these kinds of advances are most commonly used. For instance, a person with LIS (a condition in which a patient is cognizant and aware but unable to move or speak) would be able to communicate by controlling a computer. The cerebral implant records the neural activity

related to inner speech, also referred to as "covert speech" or "verbal thinking," and communicates it to a computer, which then transmits it as synthetic speech after being processed by an artificial neural network. However, this technology does not help LIS patients regain their native speech patterns.

In the future, it may be possible to influence a person's ideas, feelings, and behavior. The potential to detect and prevent movement abnormalities, stroke, vision, hearing, multiple sclerosis, and the cure of thousands of other diseases will present significant prospects. The power of thinking can also be used to manage special interfaces.