

BRAIN GATE

TURNING THOUGHT INTO ACTION

Implantable Brain-Computer Interface for Restoring Communication and Mobility

Clinical Need

Paralysis due to spinal cord injury, stroke, or ALS is without a cure. Implantable brain-computer interfaces (iBCIs) can restore lost neurologic function by using neurotechnology to reconnect disconnected parts of the nervous system.

Our Innovative Approach

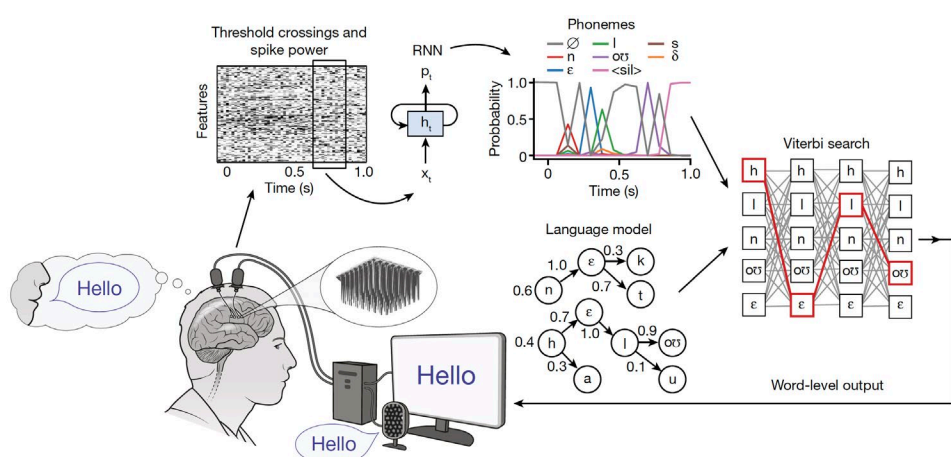
Mass General Brigham and the BrainGate consortium (braingate.org) are home to longest-running clinical trial in iBCIs, with unmatched experience and collaboration in iBCI trial design and execution. The BrainGate system harnesses cortical neural activity associated with the intent to move or speak.

Results

An ongoing study of the investigational BrainGate system has demonstrated an encouraging safety profile. It has allowed people with tetraplegia to control computers and move their hands intuitively by connecting to implanted stimulators or soft, wearable robotics. Trial participants with ALS have also used BrainGate to 'speak' up to 62 words per minute.

Commercial Potential

In addition to IP available for licensing, opportunities are available for furthering the BrainGate research, including expanding to new patient populations. BrainGate could also serve as the core "afferent" technology in closed-loop neuromodulation for movement and mental health disorders.



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