



# Paralyzed Man Controls Drone with Mind Implant – Flight Achieved!

## Description

A man with paralysis had electrodes put in his brain that let him steer a virtual drone by only thinking about moving his fingers. A clever AI system interprets his brain signals and uses them to control the drone in a computer simulation.

In recent years, brain-computer interface (BCI) research has advanced, helping people with paralysis direct a computer mouse and speak through imagining writing. But it struggles with more complex tasks with multiple inputs—until now.

Matthew Willsey, from the University of Michigan, and his team developed a program that allows a user to trigger four separate signals by simply thinking about moving their fingers and thumb.

This technology was tested on a man with tetraplegia, who had a BCI with 192 electrodes implanted in the part of his brain that controls hand movement.

An AI model decoded the signals from the electrodes, each representing different finger motions. Through training sessions, the man learned to control the drone in the simulation by thought alone, maneuvering it skillfully through obstacles.

While impressive, Willsey stresses there is more work needed to make BCIs reliable for intricate tasks. AI must be trained to understand each user's signals, and this training needs to be repeated as time passes.

Topics: Brain-Computer Interface, Artificial Intelligence, Paralysis, Technology Innovation

## CATEGORY

1. Sci/Tech - LEVEL3

## Date Created

2025/01/21

## Author

aimeeyoung99