Controlling a Computer Cursor with your Mind. Almost.
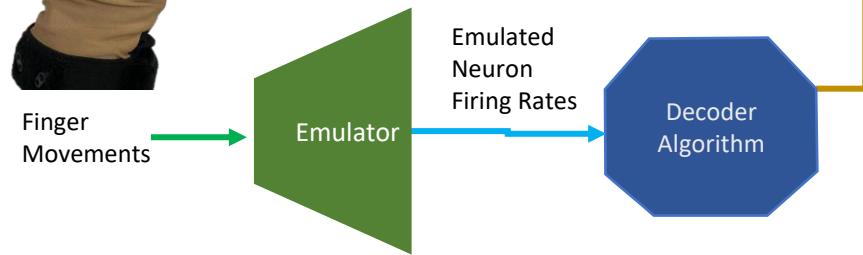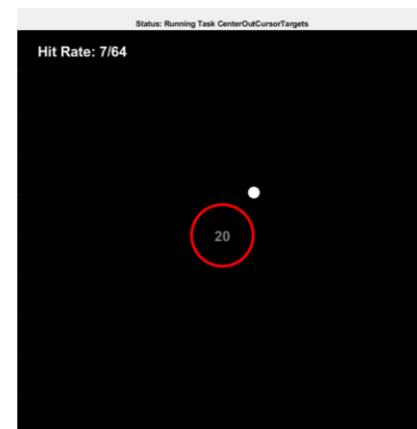
Objective: Learn what aspects of decoder algorithms make controlling a cursor with neural inputs the most intuitive.

Requirements:
Age: 18 – 45 years old
Health: Healthy subjects with no neurological or muscular deficits
Experiment: One 1-3 hour Session

The jaBCI

Status: Running Task CenterOutCursorTargets

Hit Rate: 7/64

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Cursor Commands

Finger Movements → Emulator → Emulated Neuron Firing Rates → Decoder Algorithm

Overview:
This is a non-invasive behavioral study that will involve subjects wearing a glove that records their hand movement so that they can control a computer cursor. The comfortable non-invasive glove is used to create emulated neuron signals that allow us to test how subjects perform controlling the cursor with various decoders (algorithms that convert input signals into curser commands) used. By improving these algorithms noninvasively and with many participants we can improve Brain-Computer Interface (BCI) technology, system that collect neuron signals and use them to control external devices, to be effective at giving control to those with paralysis. Participants will have no direct benefit in this study, but they will be compensated up to $30 for participating.

Location: Emory Rehabilitation Hospital R206 at Emory University

Interested?

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