

## Participants Needed for Research Study on Brain Controlled Computers for Communication

Do you want to learn to control a brain-computer interface (BCI)? BCIs for communication record brain activity and translate that activity into computer and augmentative and alternative communication (AAC) device control. Brain activity involved in control of the BCIs will be recorded by electroencephalography (EEG), a method which records brain waves via electrodes placed in a cap, which is similar to a swimming cap. If you would like to learn more about BCI, we are currently investigating how individuals learn BCI control and what factors may influence performance. The BCI you will learn to control will randomly highlight different items in a grid, while you pay attention to the item (e.g., letter) you wish to select.

**Requirements:** Participants should be 19 years and over. We are recruiting individuals with physical difficulties due to a diagnosis of a neuromotor difference, such as: amyotrophic lateral sclerosis, cerebral palsy, spinal cord injury, traumatic brain injury, Parkinson's disease, etc, whom are without electrical implants (e.g., pacemakers) and a history of seizures. We are also recruiting individuals without physical difficulties. You will receive \$20 financial compensation per session for your participation in the study. Payment will be made by an Amazon e-giftcard.

**Duration**: During an initial session, participants will complete different cognitive-sensory-motor assessments to inform BCI outcomes. Following initial assessments, BCI control sessions will last approximately 90 minutes. Participants will complete *a maximum* of 10 (actual number of sessions may be less than 10) BCI training sessions, where they will copy provided words and complete question-response type tasks.

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