

## Brain Computer Interfacing: Word Recognition and Motor Imagery Experiments

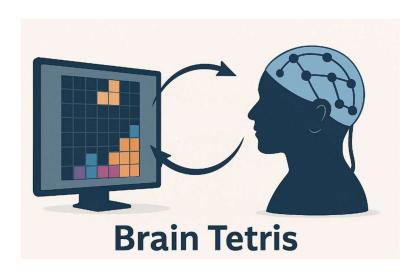
Thank you for your interest in this study. Your time and efforts are much appreciated.

## **Word Recognition**

We are looking at how the brain remembers small amounts of information and its ability to recall this information in the future. Our goal is to predict if a participant will be able to recall a piece of information in the future from their brain activity when first looking at it. To do this we have created a simple word recognition task, where you will be shown a series of English words in a sequence, then after a brief delay with a distraction task of basic addition, asked to verbally recall as many as you can in any order while a microphone records your response. This will be repeated several times with a different set of words in each run. We are not interested in how many you remember so there is no pressure on being evaluated on your memory, but rather we are interested in the differences in your brain activity for the words you do remember against the words you do not.

## **Motor Imagery**

As a secondary task to calibrate the system and as a general practice and training task, we will also run a short experiment into imagined hand and foot movements. We will ask you to sit in a comfortable position with your hands resting on the desk and imagine raising either your left or right hand, or your feet, and attempt to detect which you are performing. From this we aim to attempt real time classification of the 3 movements, as well as rest and evaluate if we can use those movements to play a basic game, in our case Tetris. Our goal is for you to be able to play tetris using these imagined movements.



If you have any questions regarding this study please feel free to ask or contact the researcher or supervisor of this study now, or at a later date. Please note that we cannot diagnose any particular condition from the results of this study or tell whether someone is "normal" or not. If you wish to withdraw your data please contact the researcher. If you would like to receive a report of the main findings of the study (or a summary of the findings) when it is completed please contact the researcher, however individual feedback on your results cannot be given.

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