

**Date: <Insert Date>**

Dear Participant,

I, Anne-Claire Bourland am a second year Computer Science student at the University of Bristol. During this summer I am conducting a research within the Engineering Faculty of Bristol University. I am investigating the usage of electromyographic (EMG) sensors on facial movement for learning and classifying different words used in speech in order to, later on, transmit "silent speech" to others. We have built a prototype wearable device using these sensors that is designed to classify the muscle activity of the face. Through this study we aim to examine the classification accuracy of the device in different conditions.

We will be conducting an investigation using our device at the University of Bristol to which we would like to invite you to participate.

The experiment will take place in a single session. The session is expected to take 30 minutes, during which you will be asked to read and mouth words which will be shown on a computer monitor in front of you.

The device consists of standard AgCl EMG electrodes which will be stuck onto your skin on your face using adhesive. These are the same electrodes used in electrocardiograms (ECG), and are safe to use. There isn't any risk of electrocution during electromyography. The electrodes placed on your face only record the electrical activity of your muscles; they don't emit electricity.

Initially you will have the opportunity to practice speaking and mouthing words, repeating until comfortable. Then you will begin speaking and mouthing words whilst the device gathers data on the muscle activity.

The data will be stored with an anonymous identification, along with a survey and any comments you wish to share about the study. The survey will collect non identifying data, such as gender and age, as well as some general information about your experience and opinions from the study.

Results from the research will be presented in accordance with rules for anonymity such that the results cannot be traced to individual participants. The outcomes of the study can be made available to you on request.

We would like to invite you to participate in this project by taking part in an experiment using our device in the Merchant Venturers Building of the University.

**Confidentiality:** All of the information we collect from you (data logged by the computer and observations made by yourself and the experimenters and your questionnaire responses) will be stored so that your name is not associated with it (using an arbitrary participant number). All data will be handled confidentially and anonymously. Any write ups of the data will not include any information that can be linked directly to you. The anonymous data will be encrypted (as per University of Bristol Policy) and stored by the Project Investigator (Anne-Claire Bourland) on a password-protected computer system only accessible by the Project investigator and the specific investigator analysing the data. Hard copies of the data will be stored in a locked filing cabinet. Do you have any questions about the confidentiality of the study?

**Right to Withdraw:** You are free to withdraw from the study at any time without penalty and without losing any advertised benefits. Withdrawal from the study will not affect your academic status or your access to services at the university. If you withdraw, your data will be deleted from the

study and destroyed. In addition, you are free to not answer specific items or questions on questionnaires. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

If you have further questions concerning matters related to this research, please contact:  
Anne-Claire Bourland ([ab14188@my.bristol.ac.uk](mailto:ab14188@my.bristol.ac.uk), 07733 101 207).

**Questions:** If you have any questions concerning the study, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided above if you have questions at a later time. Any further concerns related to your participation in this study, please direct them to the Faculty of Science Human Research Ethics Committee, via Liam McKervey. ([liam.mckervey@bristol.ac.uk](mailto:liam.mckervey@bristol.ac.uk))

If you agree to participate, please sign the attached form and return it to us by <InsertDate> by email, or in-person. Please note that you are free to withdraw from participation at any time.

Thank you for your interest and co-operation and if you would like more information about the research project or have any questions about our work, please feel free to contact me via email [ab14188@my.bristol.ac.uk](mailto:ab14188@my.bristol.ac.uk).

Yours Sincerely,

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Anne-Claire Bourland