**School of Computing Science Ethics Committee**

**University of Glasgow**

**Request for Ethical Approval**

This form is to be used by 3rd year, 4th year, MSci, and taught MSc students in the School of Computing Science whose projects entail human participation and which do not conform to any one of the criteria on the project ethics checklist form (<http://www.dcs.gla.ac.uk/~hcp/ethics/projects-form.pdf>).

Students enrolled for an MSc by Research or a PhD, and members of academic or research staff should submit their request for ethics approval to the Faculty Ethics Committee (see <https://frontdoor.spa.gla.ac.uk/researchethics/>)

The form should be completed and returned by email to Professor Matthew Chalmers (matthew.chalmers@glasgow.ac.uk) to whom all enquires or requests for advice should be directed.

All sections of this form must be completed.

Before completing this form, please read the British Psychological Society’s Code of Conduct (available on <http://www.dcs.gla.ac.uk/~hcp/ethics/>). The relevant sections of the code are noted against questions in this form.

Copies of the participant information form and consent form should be submitted together with this form.

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**Project title: Electrotactile Feedback**

1. Describe the basic purposes of the proposed research:

*To investigate if there is a link between a users perceived strength of electrotactile feedback and their skin conductance.*

1. Describe the design of your experiment (e.g. conditions, number of participants, procedure, equipment):

*Participants will attach the two pairs of electrodes to their palm of their non-dominant hand, the first pair for the custom hardware to provide the stimuli and the second pair is for the EDA recorder. They will then launch the EDA recording software and start the recording. Next they will start the stimuli software, this will require them to input their participant ID, they will then be asked to calibrate the stimuli, by incrementing or decrementing the voltage delivered by the device. Next they will complete a 5 minute meditation to bring the user to a baseline that can be recreated. They will then be asked to recalibrate again.*

*Once a baseline has been established the user will complete a Stroop test, followed by a calibration and then the meditation and calibration. This is the first method of increasing a user’s EDA, the second method involves riding a static bike. The participants will ride on the bike for 5 minutes followed by a calibration.*

*After the bike ride they will be debriefed and fill out the questionnaire.*

*The device has hard limits to prevent large voltages being supplied to the user. We are aiming to recruit 15-20 participants. After the experiment users will be asked to fill out a questionnaire on their experiences, this contains no personal information.*

1. Describe how the procedures affect the participants:

*Users will experience a stimulation of the palm of their hand while they interact with the software developed. This is similar to that of haptic feedback on a smart watch or smartphone. This should leave no lasting effects on users. The strength of this signal is controlled by the user through the software.*

1. State what in your opinion are the ethical issues involved in the proposal:

* *Use of a non-standard device – Custom hardware from the Kaijimoto lab in Japan, designed to deliver electrotactile stimuli, this device has been used in previous experiments, and similar devices has been used for 1 phd project and 2 masters projects in the past. I am using adapted version of previous ethics checklist, consent forms and info sheets from those experiments. The base parameter values are built off of those experiments*
* *Use of a non-standard device – static bike, this has been used in a previous phd project and post grad research. Participants will not be asked to ride hard, ideally they should be at a RPE (rate of perceived exertion) of 3 out of 10*
* *Informed consent: Develop a consent form that clearly explains the purpose, risks, and benefits of the study, obtaining written consent from all participants.*

1. Specify whether the research will involve children or those with mental disability or handicap:

If so, explain the steps taken to obtain permission from LEAs, headteachers, parents etc:

*Participants of this nature will not be used.*

1. State if payment will be made to participants:

*Participants will not be paid*

1. Describe procedures for advertising, for recruiting participants, and for obtaining consent from participants:

* *Advertised through word of mouth and the Year 4 discord server, Then through an email to people who are interested. If this fails then I will ask colleagues at my work.*
* *Consent will be obtained from eligible candidates who have expressed interest via a consent form. The consent form and information sheet will be sent out in the email to respondents.*

1. State whether the proposal is in accord with the BPS Code of Conduct or the ESRC Frame of Research Ethics.

*Affirmative*

1. Describe how the participants’ anonymity and confidentiality will be maintained:

*Participants will be given a participant ID to anonymise the data that is generated. The results of questionnaire will use this participant ID to remove the risk of participants being identified based on results. No sensitive information will be recorded.*

1. Date on which the project will begin and end: \_Approval of ethics - 22/03/2025\_
2. Location at which the project will be carried out: \_University of Glasgow – SAWB HCI testing lab
3. Describe how participants will be debriefed at the end of the experiment. This must include the opportunity to contact the experimenter (or supervisor) for feedback on the general outcome of the experiment.

*Participants will be given the debrief sheet and talked through the experiment. They will have the purpose, aim, objectives and methodology of the experiment explained. There will be time allocated to answer any/all questions they have. They will be given my (student) and my supervisors email addresses if they wish to contact us at any time.*

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Student’s Name \_\_\_\_\_\_\_\_Patrick Kiehlmann\_\_\_\_\_\_\_\_

Year level (3rd, 4th, MSci, MSc) \_\_\_\_\_\_\_\_\_4th\_\_\_\_\_\_\_\_\_\_

Student’s Signature\_\_\_\_\_\_A close-up of a signature

AI-generated content may be incorrect.\_\_

Date \_\_\_04/03/2025\_\_\_

Supervisor’s Name \_\_\_\_\_\_\_\_Stephen Brewster\_\_\_\_\_\_\_\_\_

Supervisor’s Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_

SOCS Ethics Committee Signature \_ Matthew Chalmers\_\_

Date