HUMAN RESEARCH ETHICS COMMITTEE
Application Form

Created by: **u6076893**
Record number: **10196**
Protocol type: **Expedited Ethical Review (E1)**
Protocol number: **2018/503**

Date entered: **14/07/2018**
Ethics program type: **Undergraduate**
Requested start date: **10/09/2018**
Requested end date: **20/10/2018**

Protocol title: **An Arduino-based instrument for more intuitive expression of electronic music**

Investigators

	Name	Role	Department
	Swift, Benjamin	Supervisor	Research School of Computer Science, College of Engineering and Computer Science, ANU
	Wang, Tina	Primary investigator	3A Institute, College of Engineering and Computer Science, ANU

Investigators Detailed

Name: Swift, Benjamin **Role:** Supervisor

Expertise: Currently an academic at the ANU, specialising in Human-Centred Computing and High-Performance Computing
Leads the code/creativity/culture group at the ANU Research School of Computer Science
Published multiple research papers
Provided the idea for the interview-style methodology based on past experience with NIME-style research

Name: Wang, Tina **Role:** Primary investigator

Expertise: I have done research previously through the research course COMP2560, where I completed a report, presentation and poster
I have experience writing research reports throughout the fields of Biology, Psychology
I have undertaken many experiments requiring human input as part of 3 psychology courses.

This gave me an understanding of the procedure required for briefing the participant, both spoken and in writing.
My current research is a project for the research course COMP3770. The methodology is to build an electronic musical instrument and gather feedback from those with a musical background (most likely ANU students with over one year of musical training)

External Investigators

	Name	Role	Institution

Departments

	Primary	Department	Faculty
	No	3A Institute	College of Engineering and Computer Science
	Yes	Research School of Computer Science	College of Engineering and Computer Science

Project Questions Detailed

Description of Project

Describe the research project in terms easily understood by a lay reader, using simple and non-technical language. My current research project is to build an electronic musical instrument and gather feedback on its performance from those with a musical background (ANU students with over one year of musical training).

Location of Data Collection

Australia Yes

Overseas No

Provide country / area where data collection will be conducted Canberra, Australia

Aims of the Project

List the hypothesis and objectives of your research project. To create a musical instrument

using the various features of existing open-source hardware (mostly Arduino)
To explore different facets of digital musical expression and generation (e.g. gesture-based, I/O, other)
To explore easier and more intuitive ways of creating electronic music

Methodology

In language appropriate for a lay reader, explain why the methodological approach minimises the risk to participants. (For surveys, include justification of the sample size).
The methodology entails an interview-style setting where each participant is given a demonstration of the instrument (most likely a prototype), time to experiment and attempt to play the instrument for themselves, and a series of questions concerning the instrument's performance. Most of these questions will be solely about the instrument and its features. The participant's opinion is of highest importance and no personal information is required to be divulged.

Provide the survey method, a list of the questions to be asked or an indicative sample of questions. These should give a good sense of the most intrusive/sensitive areas of questioning. We plan to present the instrument, give instructions on how to play it as well as a demo, and then allow the participant (with music background) to play around with it on their own for a period of time (perhaps 10-15 minutes). Reactions and comments will be recorded, and they will then be asked a series of questions in an interview-style setting.
The following indicative sample of questions will make use of both the Likert scale and open-ended responses (e.g. "Please answer on a scale from 1 to 5 and explain your reasoning"):
1. How engaged did you feel when playing this instrument?
2. How hard do you think this instrument is to play or learn? (This question may be asked again in relation to existing instruments, both electronic and non-electronic)
3. Do you think this instrument can engage members of the audience? (Perhaps also in relation to other instruments)
4. How much did you enjoy interacting with the instrument?
5. How frustrated did you feel while interacting with the instrument?
6. Were you able to create a wide variety of sounds?
7. Could you/did you manage to discover any techniques while playing?

What mechanisms do the researchers intend to implement to monitor the conduct and progress of the research project? For example:
How often will the researcher be in touch with the supervisor?
Is data collection going as expected? If not, what will the researcher do?
Is the recruitment process effective?
How will the researcher monitor participants willingness to continue participation in the research project, particularly when the research is ongoing? The researcher will have fortnightly meeting with supervisor and any extra communication over email as required
Participation in this research project will be one-off, so no participant interest to continue is required

Participants

Provide details in relation to the potential participant pool, including:

target participant group;

identification of potential participants;
initial contact method, and
recruitment method. Target audience - ANU students with at least one year of musical background.
Recruitment - On-campus advertising using posters
Initial contact method can be using an email

Proposed number of participants 0

Provide details as to why these participants have been chosen? As we are seeking to evaluate a musical instrument, some amount of musical background is required to give constructive feedback. Thus, we ask that participants must have at least one year's worth of musical background.

Cultural and Social Considerations/Sensitivities

What cultural and/or social considerations/sensitivities are relevant to the participants in this research project? We will strive to consider the social or cultural needs of participants, however, there are unlikely to be any issues in this area. To cover for this unlikely case, participants will be told that they may leave the experiment at any time if they experience any discomfortable or distress.

Incentives

Will participants be paid or any incentives offered? If so, provide justification and details. No

Benefits

What are the anticipated benefits of the research? We seek to gain a deeper understanding of the relationship between technology and music, and how we can make electronic music more intuitive to play and create. It can also help to bridge the divide between technology and the arts, or even technology and the general public, by showing that something as creative even music can be produced intuitively using electronics.

To whom will the benefits flow? Musicians, computer scientists and anyone who is interested in the intersection of creative expression and technology.

Informed Consent

Indicate how informed consent will be obtained from participants. At least one of the following boxes MUST be ticked 'Yes'.

In writing Yes

Return of survey or questionnaire No

Orally No

Other No

If Oral Consent or Other, provide details.

Confidentiality

Describe the procedures that will be adopted to ensure confidentiality during the collection phase and in the publication of results. Identifying data will not be stored
We will not discuss the data of other participants during the interview stage

Data Storage Procedures

Provide an overview of the data storage procedures for the research. Include security measures and duration of storage. Results will be stored on a password-protected computer and backed up on password-protected cloud storage for a period of 1 year
Identifying data will not be stored

Feedback

Provide details of how the results of the research will be reported / disseminated, including the appropriate provision of results to participants. If appropriate, provide details of any planned debriefing of participants. The result of the research project will be reported in a research report submitted as an assessment piece for the course COMP3770. This report can be made available to participants ??
The participants will be debriefed by telling them that their feedback is extremely valuable and will be taken into consideration as the musical instrument is evaluated and possibly developed further.

Supporting Documentation

Please ensure electronic copies of any supporting documentation have been uploaded the documents tab of the relevant protocol.

Has this work been approved by another Human Research Ethics Committee (HREC)? No

If yes, please give the name of the approving HREC.

Funding

Is this research supported by external funding? No

Provide the name/s of the external sources of funding. Please include grant number/s if available.

Is the research conducted under the terms of a contract of consultancy agreement between the ANU and the funding source? No

Describe all the contractual rights of the funding source that relate to the ethical consideration of the research.

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High Risk One Summary

	Question	Answer
	Is this a clinical trial?	No
	Does this research involve the intentional recruitment or issues involving Aboriginal and / or Torres Strait Islander Peoples?	No

High Risk Two Summary

	Question	Answer
	Does this research involve Human Genetics?	No
	Does this research involve Human Stem Cells?	No
	Does this research involve Women who are pregnant and the Human Foetus?	No
	Does the research involve people highly dependent on medical care who may be unable to give consent?	No
	Does the research involve people with a cognitive impairment, an intellectual disability or a mental illness?	No
	Does this research involve an intention to study or expose or is likely to discover illegal activity?	No
	Does this research involve human gametes (eggs or sperm)?	No
	Does this research involve excess ART embryos?	No

Expedited Questions Summary

	Question	Answer
	Third Party Identification	No
	Children or Young People	No
	Dependent or Unequal Relationship	No
	Membership of a Group, or Related Issues	No
	Physical Harm	No
	Psychological Harm (includes Devaluation of Personal Worth)	No
	Social Harm	No
	Economic Harm	No
	Legal Harm	No
	Covert Observation	No
	Deception	No
	Sensitive Personal Information	No

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	Question	Answer
	Overseas Research	No
	Collection, use or disclosure of personal information WITHOUT the consent of the participant	No

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Supporting Documentation

Please ensure electronic copies of the supporting documentation have been uploaded into the documents tab of your protocol

These may include (please circle the relevant answer):

List of indicative questions	**Y/N**
Copy of questionnaire / survey	**Y/N**
Invitation or introductory letter/s	**Y/N**
Publicity material (posters etc.)	**Y/N**
Information sheet	**Y/N**
Consent form	**Y/N**
External approval documentation	**Y/N**
Research visa (if applicable)	**Y/N**
Other (specify below)	**Y/N**

For other, please specify:

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SIGNATURES AND UNDERTAKINGS

PROPOSER OF THE RESEARCH

I certify that all the persons listed in this protocol have been fully briefed on appropriate procedures and in particular that they have read and are familiar with the national guidelines issued by the National Health and Medical Research Council (the National Statement on Ethical Conduct in Human Research 2007).

I certify that the above is as accurate a description of my research proposal as possible and that the research will be conducted in accordance with the National Statement on Ethical Conduct in Human Research 2007. I also agree to adhere to the conditions of approval stipulated by the ANU Human Research Ethics Committee (HREC) and will cooperate with HREC monitoring requirements. I agree to notify the Committee in writing immediately of any significant departures from this protocol and will not continue the research if ethical approval is withdrawn and will comply with any special conditions required by the HREC.

Signed:.....  **Date:**30/7/18

ANU SUPERVISOR

I certify that I shall provide appropriate supervision to the student to ensure that the project is undertaken in accordance with the undertakings above:

Signed:..... Date:.....

AS FROM MONDAY 21ST OCTOBER 2013 THE SIGNATURE OF THE HEAD OF ANU DEPARTMENT/GROUP/CENTRE IS NO LONGER REQUIRED.

Australian National University

Participant Information Sheet

Researcher:

My name is Tina Wang and I am conducting this research as an undergraduate student of the Bachelor of Advanced Computing (R&D). I am a researcher under the Research School of Computer Science at the Australian National University.

Project Title: An Arduino-based instrument for more intuitive expression of electronic music

General Outline of the Project:

- **Description and Methodology:** I am conducting research on building an electronic musical instrument that feels more intuitive to play than existing technology. Interviews will be conducted after participants are shown a demonstration of the instrument and given time to play the instrument for themselves. The questions presented will be solely about the instrument and its performance features, and the participant's responses will be recorded.
- **Participants:** I intend to interview 10-20 participants with at least one year's worth of musical background. Participants will be opt-in and recruited from advertising on-campus at ANU.
- **Use of Data and Feedback:** The data will be collected as part of the instrument's evaluation and published as part of a research report under the same project title. This report will be made available on the ANU Research School of Computer Science code/creativity/culture research group website (https://cs.anu.edu.au/code-creativity-culture/) post-completion.

Participant Involvement:

- **Voluntary Participation & Withdrawal:** Participation in this research is entirely voluntary. You do not have to be involved unless you want to, and you can withdraw if you change your mind without telling me why. If you do decide to withdraw, and you are free to choose whether the data you've already given will be used. You can also refuse any specific parts of the project (e.g. answering a specific question, audio recording). There will be absolutely no consequences in withdrawing.

- **What does participation in the research entail?** You will be given a demonstration of the instrument and a short period of time (10-15 minutes, but this period may be longer or shorter up to you) to freely experiment with the instrument. Your reactions and comments will be recorded if you consent to it. You will then be asked a series of questions in an interview-style setting concerning the instrument. Additionally, the entire session will be audio recorded if you consent to it. Your data will be used purely for evaluation of the instrument.

- **Location and Duration:** The total time, including both instrument interaction and interview, should go for roughly 1 hour. The research will be conducted on ANU campus at Building 145.

- **Risks:** The research carries little risk, however, there is a slight risk that despite my best efforts to keep your identity confidential, you *may* be identified through the reactions and comments made from experimenting with the instrument. However, please note that this is extremely low in probability, and this data unlikely to be of any personal nature.

- **Benefits:** You may not personally benefit from participating in this research, but we expect that this research will improve engagement with electronic music. We seek to gain a deeper understanding of the relationship between technology and music, and how we can make electronic music more intuitive to play and create. It can also help bridge the divide between technology and the arts, and even technology and the public, by showing that it can be used to create something as creative even music.

Exclusion criteria:

- **Participant Limitation:** Participants must have a musical background of one year minimum.

Confidentiality:

- **Confidentiality:** Your identity will be kept confidential as far as the law can allow. Access to your data will be restricted to the research team (only me and my supervisor) and your data will be anonymous. Published results will only be reported through numbers and comments. There is a possibility that you may be identifiable through the comments, however, this is of very low probability.

Privacy Notice:

In collecting your personal information within this research, the ANU must comply with the Privacy Act 1988. The ANU Privacy Policy is available at https://policies.anu.edu.au/ppl/document/ANUP_010007 and it contains information about how a person can:

- Access or seek correction to their personal information;
- Complain about a breach of an Australian Privacy Principle by ANU, and how ANU will handle the complaint.

Data Storage:

- **Where:** Results will be stored on password-protected computers at the Australian National University and backed up on password-protected cloud storage provided by the Australian National University (on a Github ANU College of Engineering and Computer Science account).

- **How long:** Research data will be stored for a period of one year following the date of publication using this data.

- **Handling of Data following the required storage period:** After the storage period, the research data will be de-identified and archived at The Australian National University for later research, potentially by other researchers.

Queries and Concerns:

- **Contact Details for More Information:** Any requests for information or queries regarding the study participants should be directed to tina.wang@anu.edu.au (+61 425 299 932) or my supervisor Professor Ben Swift (ben.swift@anu.edu.au, +61 6125 7027).

Ethics Committee Clearance:

The ethical aspects of this research have been approved by the ANU Human Research Ethics Committee (Protocol 2018/503). If you have any concerns or complaints about how this research has been conducted, please contact:

Ethics Manager

Australian
National
University

The ANU Human Research Ethics Committee
The Australian National University
Telephone: +61 2 6125 3427
Email: Human.Ethics.Officer@anu.edu.au

Australian National University

WRITTEN CONSENT for Participants

An Arduino-based instrument for more intuitive expression of electronic music

I have read and understood the Information Sheet you have given me about the research project, and I have had any questions and concerns about the project (listed here

_____

_____)

addressed to my satisfaction.

I agree to participate in the project. YES ☐ NO ☐

I agree to this interview being audio-recorded YES ☐ NO ☐

I agree to be identified in the following way within research outputs:

Full name YES ☐ NO ☐

Pseudonym YES ☐ NO ☐

No attribution YES ☐ NO ☐

Signature:……

Date:……