

ITRI 671 Research ethics form: Honours project

Name: Hano Strydom

Title of project: Facial Recognition as a tool to determine if students understand a topic

Supervisor: Mnr. Henri van Rensburg

Starting and end dates of project: 24/02/2022 – 30/10/2022

1. Have you read the information available related to research ethics (Chapter 5 of Researching Information Systems and Computing; BJ Oates and Chapter 13 of Writing for computer science, J Zobel; Manual for post graduate studies, available on efundi)?	Yes X	No
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2. Do you make use of people as source of data in your project (for example the completion of questionnaires or evaluation of products)?	Yes X	No
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3. Are there any aspects of your research that you need permission from another party to use (for example use of property or tools)? If yes, provide more detail.	Yes	No X
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<p>4. Describe your research question and give a short description of your plans for the collection of data.</p> <p>Research Question: Lecturers, teachers, and professionals need to be able to “read the room” without physically having to pay attention to each individual student. This study will attempt to answer the question of whether there is a way for lecturers to determine how many students understand the current topic at hand, without physically paying attention to the individual students.</p> <p>Data Collection: Questionnaire</p> <ul style="list-style-type: none">- During this research, students will be asked to participate in an anonymous questionnaire.- https://forms.gle/K97FSaHBnQSVDf9 <p>Face ‘recording’</p> <ul style="list-style-type: none">- During my artifact stage, participants will be used in order to determine the accuracy of the facial expression recognition software.
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5. Describe how you plan to provide information about yourself and the goals of your research to participants.

1. I will firstly introduce myself and tell them what I am studying.
 - a. Hano Strydom studying Hons. Computer Science
2. I will make them aware about what the project and my research is about.
 - a. "Facial Recognition as a tool to determine if students understand a topic"
3. I will provide information about the survey
 - a. Time it takes to complete the survey (2 minutes)
 - b. It is entirely optional, and not personal information such as names and emails will be stored
 - c. All data gathered from the questions will be strictly confidential, and only be used for research purposes.

6. Describe what methods you will use to get permission from participants in your study.

Seeing the survey is entirely optional, and the users first needs to answer 2 questions before they are allowed to answer the survey:

1. Are you aware this Survey is optional and not compulsory?
2. Do you give consent for me, Hano Strydom, to use the information gathered as part of my research?

For the software I will ask participants permission, and if they do not accept, they do not have to participate.

7. Will you be able to ensure that participants' information will be used in an anonymous, private and confidential way? How?

The survey is a google docs form. Google is very secure, and the statistics gathered from the survey will only be used in my research and not stored locally or shared with any other person.

The software doesn't store any user data, and the faces are blurred out. Only facial expressions are extracted and used to determine their emotion.

Yes

X

No

8. Are there any foreseeable risks of damage (physical, social or psychological) to participants or the environment? If you answer yes, give detail of the preventative measures you will follow.	Yes	No X
9. Are there any foreseeable risks to the NWU, for example lawful actions that may follow the research, or damage to the image of the university? If yes, give detail.	Yes	No X
10. Are there any other ethical issues that may occur during the execution of the research (for example conflicting interests)? If yes, provide detail and explain how you plan to handle them.	Yes	No X

I declare that the information contained in this form is accurate. I have attempted to identify the risks that may arise in conducting this research and acknowledge my obligations and the rights of the participants. I confirm that the research will be conducted in line with all University, legal and ethical standards.

Name of student: Hano Strydom

Signature: *Hano Strydom*

Date: 2022/08/25

Name of study leader: Mnr. Henri van Rensburg

Signature: *[Signature]*

Date: 2022/08/25