**RESEARCH ETHICS REVIEW CHECKLIST FOR UG STUDENTS**

The University Research Ethics & Governance Framework applies to all aspects of research undertaken within the University, including research undertaken by undergraduate students as a part of their Graduation Thesis or coursework. All UG students therefore should consider the ethical dimensions of their research using the self-assessment checklist below and, where necessary, seek ethical review and approval.

Ethical review must be sought for any project that answers **YES** to any one or more of the questions in this document:

|  |  |  |
| --- | --- | --- |
| **Applicant Name: YUEJU HAN** | | |
| **Programme of Study: Artificial Intelligence** | | |
| **Project Title:** **Detect Retina Damage From OCT Images** | | |
| **Project Abstract:**  **This project aims to detect retina damage from Optical Coherence Tomography (OCT) images using machine learning or deep learning techniques.** | | |
| **Project methodology:**  **This project focuses on the domain of image classification. Therefore, I aims to explore state-of-the-art deep learning models, including ResNet, Vision Transformer (ViT), and CLIP. These models will be utilized to comprehensively investigate the problem, leveraging techniques such as transfer learning, fine-tuning, and data augmentation to optimize performance. Additionally, I would try my best to propose innovative approaches to improve the model performance under this problem.** | | |
|  |  | **YES/NO** |
|  | Is the project sponsored externally or does it include work that was done as part of a project sponsored externally (e.g. sponsored by a company, work done as part of internship, etc.)? | NO |
|  | Does the project involve human participants? | NO |
|  | Does the project involve personal data in any format from which a person is identifiable (including personal information, photos, video or audio, or biological materials etc)?  *(Reference:* [*https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/personal-information-what-is-it/what-is-personal-data/what-is-personal-data/#:~:text=“%27personal%20data%27%20means%20any,location%20data%2C%20an%20online%20identifier*](https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/personal-information-what-is-it/what-is-personal-data/what-is-personal-data/#:~:text=)*; if not sure seek advice from the Ethics Officers.)*  If YES, is the personal data from an existing dataset?  If YES,   1. did the participants who originally provided the data give permission for it to be used in further research? 2. is the dataset publicly available and accessible by student and supervisor independently? | NO |
|  | Does the project involve human remains? | NO |
|  | Does the project involve surveys or questionnaires? | NO |
|  | Will the participants of the project include staff or students of the University, or colleagues or clients in a work environment? | NO |
|  | Does the project involve collecting personal data from websites or from social media (e.g., Facebook, Twitter)? | NO |
|  | Does the project involve children (under 18 years) or vulnerable adults? | NO |
|  | Does the project involve any clinical procedure or involve clinical populations? | NO |
|  | Does the research have the potential to cause distress or discomfort to participants or any member of the research team? | NO |
|  | Does the project involve the collection of material that could be considered of a sensitive personal, medical or psychological nature, or is restricted/constrained by other data protection requirements? | NO |
|  | Does the project involve concealment or deception or deliberately misleading participants? | NO |
|  | Does the project involve face-to-face interviews or the collection, preservation or use of sound and/or video material involving human participants? | NO |
|  | Is there any potential for conflict of interest between research funder, investigators and/or participants that may affect funding, dissemination or other research outcomes? | NO |
|  | Could the project lead to financial gain for funders, investigators or participants? | NO |
|  | Is the data likely to contain material that is indecent, offensive, defamatory, threatening, discriminatory or extremist? | NO |
|  | Are there any contractual conditions attached to working with or storing the data? (e.g., an Institutional data sharing agreement.) | NO |
|  | Could working with this data cause an increased risk of attack (cyber- or otherwise) against the University? (E.g., from pressure groups.) | NO |
|  | Does the project have the potential to cause environmental damage or harm?  *This includes the natural environment but also buildings and structures created by people, especially ones of historical or archaeological importance.* | NO |
|  | Does the project give rise to a realistic risk to the national security of any country? | NO |
|  | Does the project have the potential to cause reputational damage to the researcher, research participants or the University? (e.g. made complicit to an illegal act, involves accessing materials that would normally be prohibited by the UoA’s computing regulations, research into activities that could be considered illegal) | NO |
|  | Does the project involve dual-use research (i.e. where the research is intended to be beneficial, but which could be misapplied to do harm)?  *If not sure, seek advice from the Ethics Officers.* | NO |
|  | Does the project involve the discussion of sensitive topics (e.g., sexual activity, drug use)? | NO |

**SUPPORTING DOCUMENTS / ATTACHMENTS:**

Document Name: License Information for Dataset

Description: The dataset is licensed under CC BY-NC-SA 4.0. The terms of the license can be reviewed through this link. The dataset is available for non-commercial use and requires that derivative works be shared under the same license.

*Other Attachments (delete YES/NO/NOT APPLICABLE as appropriate)*:

I have attached a Participant Information Sheet. NOT APPLICABLE

I have attached a Consent Form NOT APPLICABLE

I have attached a schedule of questions for surveys and/or interviews. NOT APPLICABLE

Public data access / use license / statement of explanation. NOT APPLICABLE

The dataset follows the

**ADDITIONAL GUIDELINES FOR SUPERVISORS AND STUDENTS:**

1. Supervisors should restrict their project input to non-technical only e.g. scientific writing, and to explaining published work.
2. Both supervisor and student should restrict the project to replicating published studies within the scope of the graduation thesis course requirements and the assigned project description.
3. Both supervisor and student should use publicly available data that is accessible independently by the supervisor and the student.
4. Both supervisor and student should ensure there is no exchange of datasets, instead they should be accessed independently at source.
5. Both supervisor and student should ensure that they are both compliant with any licensing requirements for accessing the published data.
6. Both supervisor and student should use licensed or open-source software that is accessible independently.

**CONFIRMATION BY APPLICANTS:**

I (and all members of the research team, where this is a group project) have completed the University of Aberdeen [online Research Ethics & Governance training](https://www.abdn.ac.uk/staffnet/research/research-governance-304.php#panel6321). YES

NOTE: For UG, completion of this training course will be at the discretion of the Programme/Course Coordinator. This is not a mandatory requirement for ethical approval of UG research.

**I confirm that I have discussed this checklist with my supervisor.**

**Supervisor’s Feedback:**

**I am satisfied with the current progress and the filled Ethics Checklist.**

****

**Siwei Liu 4th Jan, 2025**

*Supervisor’s Name Supervisor’s Signature Date*

**I understand that if during my project the answers to any of the above questions change, I must complete a new checklist (and seek further ethical review if necessary).**

**If ethical review is required for your research project, please refer to the ethical review procedures outlined in your Project Guidelines or contact your Course / Programme Coordinator for further advice. You should attach your completed Annex A and any other supporting documentation to your application.**

**If ethical review is NOT required for your project, it is recommended that you retain the completed Annex A checklist with your research records in the event of any future queries.**

**CONFIRMATION BY ETHICS OFFICER:**

**Feedback:**

***For Ethics Officer use only***

**Proceed  Revise  Don’t Proceed**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*JI Ethics Officer’s Name JI Ethics Officer’s Signature Date*