The University must ensure that all its projects undergo appropriate ethical review before commencement.  The University has a two-stage approach, requiring ALL projects to undergo a preliminary ethical assessment process. Further guidance can be found at: <http://www.ncl.ac.uk/business-directorate/ethics/index.php>.

This form is a reduced version of the University’s Preliminary Ethical Assessment Form intended for students taking the module CSC8509. It is assumed that students on these modules will not be operating in a clinical setting; **if you are conducting your study in a clinical setting then you will need to complete the full version on this form** (please contact the module leaders).

Please complete the following (reduced) Preliminary Ethical Assessment Form.

**SECTION 1: Applicant Details**

|  |  |
| --- | --- |
| Name of Researcher (Applicant): | Anting Zhou |
| Email Address: | **572480656@qq.com** |

**SECTION 2: Project Details**

|  |  |
| --- | --- |
| Project Title: | **Implement ray tracing renderer** |

# SECTION 3: Human Participants in a Non-Clinical Setting

|  |  |  |
| --- | --- | --- |
| Does the research involve human participants (e.g. use of questionnaires, focus groups or observation)? | YES | NO√ |

# If you answered NO to Section 3, please go directly to the Declaration in Section 5.

# If you answered YES to Section 3, please complete Section 4.

**SECTION 4: Human Participants in a Non-Clinical Setting – Further Information**

|  |  |  |
| --- | --- | --- |
|  | YES | NO |
| Does the study involve other vulnerable groups (e.g. children, those with cognitive impairment, or those in unequal relationships (e.g. your own students))? |  | √ |
| Will the study require the co-operation of a gatekeeper for initial access to the groups or individuals to be recruited (e.g. students at school, members of a self-help group, and residents of a nursing home)? |  | √ |
| Will it be necessary for participants to take part in the study without their knowledge and consent at times (e.g. covert observation of people in non-public places)? |  | √ |
| Will this programme/project involve deliberately misleading participants in any way? |  | √ |
| Will the study involve discussion of sensitive topics (e.g. sexual activity, drug use)? |  | √ |
| Are any drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants or will the study involve invasive, intrusive or potentially harmful procedures of any kind?\* |  | √ |
| Will blood or tissue samples be obtained from subjects? |  | √ |
| Is pain or more than mild discomfort likely to result from the study? |  | √ |
| Could the study induce psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life? |  | √ |
| Will the study involve prolonged or repetitive testing? |  | √ |
| Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants? |  | √ |

# \* Please Note: Depending on the details of this project, this may require NHS approval.

# If you answered NO to all of the questions in Section 4: Your project does not require Full Ethical Approval. Please go to the Declaration in Section 5.

# If you have answered YES to any of questions in Section 4: You will need to describe more fully how you plan to deal with the ethical issues raised by your research by completing the Full Ethical Approval application form. This does not mean that you cannot do the research - only that you may need to seek and satisfy an ethical opinion from a Faculty Research Ethics Committee.

# SECTION 5: Declaration

|  |  |
| --- | --- |
| I certify that the information contained in this application is accurate. | |
| Name of student: | Anting Zhou |
| Date: | 29/06/2018 |
| Name of supervisor: | Gary Ushaw |

# 