University of Nottingham Ningbo

Research Ethics Checklist for
Undergraduate and Taught Masters Students

[strongly informed by the ESRC (2012) Framework for Research Ethics]

A checklist should be completed for every research project or thesis where the research involves the participation of people, the use of secondary datasets or archives relating to people and/or access to field sites or animals. It will be used to identify whether a full application for ethics approval needs to be submitted. You must not begin data collection or approach potential research participants until you have completed this form, received ethical clearance, and submitted this form for retention with the appropriate administrative staff.

Completing the form includes providing brief details about yourself and the research in Sections 1 and 2 and ticking some boxes in Sections 3 and/or 4, 5, 6. **Ticking a shaded box in Sections 3, 4, 5 or 6 requires further action by the researcher**. Two things need to be stressed:

- Ticking one or more shaded boxes does not mean that you cannot conduct your research as currently anticipated; however, it does mean that further questions will need to be asked and addressed, further discussions will need to take place, and alternatives may need to be considered or additional actions undertaken.
- Avoiding the shaded boxes does not mean that ethical considerations can subsequently be 'forgotten'; on the contrary, research ethics - for everyone and in every project – should involve an ongoing process of reflection and debate.

The following checklist is a starting point for an ongoing process of reflection about the ethical issues concerning your study.

SECTION 1: THE RESEARCHER(S)

1.1: Name of principal researcher (in CAPITALS): YUYANG LIU

1.2: Status: ☒ Undergraduate student

☐ Postgraduate taught student

1.3: School/Division: Computer Science

1.4: Student ID number: 16522049

1.5: Degree programme: BSc bachelor of science

1.6: Module name/number: Individual Dissertation Single Honours

1.7: Email address: zy22049@nottingham.edu.cn

1.8: Names of other project members (if applicable):

1.9: Name of supervisor for dissertations; module convenor or staff member for other research projects: Heng Yu(Supervisor), Matthew Pike(Module Convener)

	Yes	No
1.10: I have read the University of Nottingham Ningbo Code of Research Conduct and Research Ethics: http://www.nottingham.edu.cn/en/research/researchethics/unnc-research-code-of-conduct.aspx	☒	☐
1.11: (If applicable)I have read the University of Nottingham's e-Ethics@Nottingham: Ethical Issues in Digitally Based Research (2012) and agree to abide by it http://www.nottingham.edu.cn/en/research/documents/e-ethics-at-the-university-of-nottingham.pdf	☒	☐
1.12: When conducting research on people (Section 5) I will prepare both a participant consent form as well as an *information sheet*. I am aware that the following templates are available on the Ethics webpage: http://www.nottingham.edu.cn/en/research/researchethics/ethics-approval-process.aspx - Participant consent form 1 - Participant Information Sheet English and Chinese	☒	☐

SECTION 2: THE RESEARCH

2.1: Title of project: Social Media Analytics for Healthcare Surveillance using Text Mining

Please provide brief details (50-150 words) about your proposed research, as indicated in each section

2.2: Research question(s) or aim(s)

The general aim of this project is processing, modelling, and analysing social media data, in order to achieve accurate public healthcare surveillance and prediction. It can be detailed as follow:

Healthcare-related textual information should be extracted and modelled for the purpose of healthcare surveillance.

Robust predictive models are required for accurate forecasting of disease outbreaks and hospital emergency visits based on ML techniques.

2.3: Summary of Method(s) of data collection

Collecting data from existing dataset. More specifically, we will download data from Internet Archive, a non-profit digital library offering free universal access to books, movies & music, as well as 387 billion archived web pages, our dataset is available at https://archive.org/search.php?query=collection%3Atwitterstream&sort=-publicdate&and[]=loans__status__status%3A%22-1%22.
All the data are anonymized, and the information will be used are: textual content of tweets, created time of tweets, and the created location of tweets(only

the name of province). None of these data will be displayed in the outcome of this project. And none of these data will be used beyond this project.

2.4: Proposed site(s) of data collection

Research activities will be conducted on campus. No further data will be collected beyond that provided by the third party dataset.

2.5: How will access to participants and/or sites be gained?

https://archive.org/ is a non-profit digital library and it doesn't need any authentication, everyone can access it

SECTION 3: RESEARCH INVOLVING USE OF SECONDARY DATASETS OR ARCHIVES RELATING TO PEOPLE

If your research involves use of secondary datasets or archives relating to people all questions in Section 3 must be answered. If it does not, please tick the 'not relevant' box and go to Section 4.

NOT RELEVANT	☐

Please answer each question by ticking the appropriate box.

	Yes	No
3.1: Is the risk of disclosure of the identity of individuals low or non-existent in the use of this secondary data or archive?	☒	☐
3.2: Have you complied with the data access requirements of the supplier (where relevant), including any provisions relating to presumed consent and potential risk of disclosure of sensitive information?	☒	☐

SECTION 4: RESEARCH INVOLVING ACCESS TO FIELD SITES AND ANIMALS

If your research involves access to field sites and/or animals all questions in Section 4 must be answered. If it does not, please tick the 'not relevant' box and go to Section 5.

NOT RELEVANT	☒

Please answer each question by ticking the appropriate box.

	Yes	No
4.1: Has access been granted to the site?	☐	☐
4.2: Does the site have an official protective designation of any kind?	☐	☐
If yes, have the user guidelines of the body managing the site a) been accessed?	☐	☐
b) been integrated into the research methodology?	☐	☐

4.3: Will this research place the site, its associated wildlife and other people using the site at any greater physical risks than are experienced during normal site usage?	☐	☐
4.4: Will this research involve the collection of any materials from the site?	☐	☐
4.5: Will this research expose the researcher(s) to any significant risk of physical or emotional harm?	☐	☐
4.6: Will the research involve vertebrate animals (fish, birds, reptiles, amphibians, mammals) or the common octopus (Octopus vulgaris) in any capacity?	☐	☐
If yes, will the research with vertebrates or octopi involve handling or interfering with the animal in any way or involve any activity that may cause pain, suffering, distress or lasting harm to the animal?	☐	☐

SECTION 5: RESEARCH ON PEOPLE

NOT RELEVANT	☒

If your research involves the participation of people all questions in Section 5 must be answered.

Please answer each question by ticking the appropriate box.

	Yes	No
5.1: Does the study involve participants age 16 or over who are unable to give informed consent? (e.g. people with cognitive impairment, learning disabilities, mental health conditions, physical or sensory impairments?	☐	☐
5.2: Does the research involve other vulnerable groups such as children (**aged under 16**) or those in unequal relationships with the researcher? (e.g. your own students)	☐	☐
5.3: Will this research require the cooperation of a gatekeeper* for initial access to the groups or individuals to be recruited?	☐	☐
5.4: Will this research involve discussion of sensitive topics (e.g. sexual activity, drug use, physical or mental health)?	☐	☐
5.5: Could the study induce psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life?	☐	☐
5.6: Are 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?	☐	☐
5.7: Will this research involve people taking part in the study without their knowledge and consent at the time?	☐	☐
5.8: Does this research involve the internet or other visual/vocal methods where people may be identified?	☐	☐
5.9: Will this research involve access to personal information about identifiable individuals without their knowledge or consent?	☐	☐

5.10: Does the research involve recruiting members of the public as researchers (participant research)?	☐	☐
5.11: Will the research involve administrative or secure data that requires permission from the appropriate authorities before use?	☐	☐
5.12: Is there a possibility that the safety of **the researcher** may be in question?	☐	☐
5.13: Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants?	☐	☐

**Gatekeeper- a person who controls or facilitates access to the participants*

B. Before starting data collection

	Yes	No
6.12: My full identity will be revealed to all research participants.	☒	☐
6.13: All participants will be given accurate information about the nature of the research and the purposes to which the data will be put. (*An example of a Participant Information Sheet is available for you to amend and use* at xxxxx) *http://www.nottingham.edu.cn/en/research/documents/participant-information-sheet-in-english-and-chinese.doc*	☒	☐
6.14: All participants will freely consent to take part, and, where appropriate, this will be confirmed by use of a consent form. (An example of a Consent Form is available for you to amend and use at: http://www.nottingham.edu.cn/en/research/researchethics/ethics-approval-process.aspx)	☒	☐
6.15: All participants will freely consent to take part, but due to the qualitative nature of the research a formal consent form is either not feasible or is undesirable and alternative means of recording consent are proposed.	☐	☒
6.16: A signed copy of the consent form or (where appropriate) an alternative record of evidence of consent will be held by the researcher.	☒	☐
6.17: It will be made clear that declining to participate will have no negative consequences for the individual.	☒	☐
6.18: Participants will be asked for permission for quotations (from data) to be used in research outputs where this is intended.	☒	☐
6.19: I will inform participants how long the data collected from them will be kept.	☒	☐
6.20: Incentives (other than basic expenses) will be offered to potential participants as an inducement to participate in the research. (Here any incentives include cash payments and non-cash items such as vouchers and book tokens.)	☐	☒
6.21: For research conducted within, or concerning, organisations (e.g. universities, schools, hospitals, care homes, etc) I will gain authorisation in advance from an appropriate committee or individual.	☒	☐

C. During the process of data collection

	Yes	No

6.25: I will provide participants with my University contact details, and those of my supervisor, so that they may get in touch about any aspect of the research if they wish to do so.	☒	☐
6.26: Participants will be guaranteed anonymity only insofar as they do not disclose any illegal activities.	☒	☐
6.27: Anonymity will not be guaranteed where there is disclosure or evidence of significant harm, abuse, neglect or danger to participants or to others.	☒	☐
6.28: All participants will be free to withdraw from the study at any time, including withdrawing data following its collection.	☒	☐
6.29: Data collection will take place only in public and/or professional spaces (e.g. in a work setting	☒	☐
6.30: Research participants will be informed when observations and/or recording is taking place.	☒	☐
6.31: Participants will be treated with dignity and respect at all times.	☒	☐

D. After collection of data

	Yes	No
6.32: Where anonymity has been agreed with the participant, data will be anonymised as soon as possible after collection.	☒	☐
6.33: All data collected will be stored in accordance with the requirements of the University's Code of Research Conduct	☒	☐
6.34: Data will only be used for the purposes outlined within the participant information sheet and the agreed terms of consent.	☒	☐
6.35: Details which could identify individual participants will not be disclosed to anyone other than the researcher, their supervisor and (if necessary) the Research Ethics Panel and external examiners without participants' explicit consent.	☒	☐

E. After completion of research

	Yes	No
6.37: Participants will be given the opportunity to know about the overall research findings.	☒	☐
6.38: All hard copies of data collection tools and data which enable the identification of individual participants will be destroyed.	☒	☐

SECTION 7: ETHICAL APPROVAL

(Complete either Part A or part B)

Part A

Student's declaration of ethical research

If you did NOT tick any of the shaded boxes in Sections 3, 4, 5 and 6 of this form, please sign and date below and get the checklist countersigned (see below).

Students must submit the authorised checklist along with their assessed work to the Module Convenor or Supervisor.

Students must submit the authorised checklist along with their assessed work to the Module Convenor or Supervisor.

*Dissertation students **must** include the checklist, previously signed and authorised by their supervisor, as an appendix when they submit their dissertation proposal. Please keep one copy of this form for your personal records.*

By signing this form you are agreeing to work within the protocol which you have outlined and to abide by the University of Nottingham Ningbo's Code of Research Conduct and Research Ethics. If you make changes to your research protocol (such as changes to methods of data collection, the proposed sites of data collection, the means by which participants are accessed) which in turn would change your answers to any of the above questions then you **must** complete a new form and submit a copy to your supervisor/tutor. Once approved this should be lodged with the School Office.

Signed 刘惠翔 Date 2019/10/29

Staff Authorisation (by supervisor for dissertations; module convenor or staff member for other research projects)

Having reviewed the ethical issues arising from the proposed research:

- ☒ I consider this to be a minimum-risk study and confirm the research can go ahead as planned.
- ☐ I have requested that changes be made to the research protocol. (The researcher must complete and submit a revised form which integrates these changes.)
- ☐ This project must be referred on to the Research Ethics Panel for more detailed ethical scrutiny. (Please forward a hard copy to the School's Research Ethics Officer.)

Signed 刘 Date 2019.10.29.

Designation Assist. Prof

Please note: **any** research protocols lodged with the School Office may be subject to review by the School's Research Ethics Panel.

Part B

<u>If you ticked any of the shaded boxes</u> in sections 3, 4, 5 or 6 of this form, then you must complete SECTION 7b (below). You must then discuss all ethical issues arising, record the outcome and have this form countersigned by a member of staff (see below).

SECTION 7b: FURTHER INFORMATION & JUSTIFICATION OF METHODOLOGY

Rationale for chosen methodology and/or how ethical issue is to be addressed:

Supervisor's/staff member's response (including whether ethical issue has been satisfactorily addressed):

Ethical issue:

Rationale for chosen methodology and/or how ethical issue is to be addressed:

Supervisor's/staff member's response (including whether ethical issue has been satisfactorily addressed):

(Please continue on separate sheets if required)

Student's declaration of ethical research

If you ticked any of the shaded boxes in Sections 3, 4, 5 and 6 of this form, you should have completed Section 7b after discussion of the ethical issues with your module convenor or supervisor. Then please sign and date below and get the checklist countersigned by your module convenor or supervisor (see below).

Students must submit the authorised checklist, along with their work to be assessed, to the Faculty Office.

Dissertation students must include the checklist, previously signed and authorised by their supervisor, as an appendix when they submit their dissertation proposal. Please keep one copy of this form for your personal records.

By signing this form you are agreeing to work within the protocol which you have outlined and to abide by the University of Nottingham's Code of Research Conduct and Research Ethics. If you make changes to your research protocol (such as changes to methods of data collection, the proposed sites of data collection, the means by which participants are accessed) which in turn would change your answers to any of the above questions then you must complete a new form and submit a copy to your supervisor/tutor. Once approved this should be lodged with the School Office.

Signed …… Date ……..

Staff Authorisation (by supervisor for dissertations; module convenor or staff member for other research projects)

This section must be completed in all cases where additional information has been provided in Section 7b. It is also helpful for the project supervisor to comment on the further information provided by the student in Section 7b.

Please note that **all projects involving vulnerable groups or the study of illegal activities** should be referred on to the School Research Ethics Panel.

Having reviewed the ethical issues arising from the proposed research:

- ☐ I consider this to be a minimum risk study and confirm the research can go ahead as planned.
- ☐ I have requested that changes be made to the research protocol. (The researcher must complete and submit a revised form which integrates these changes.)
- ☐ This project must be referred on to the Research Ethics Panel for more detailed ethical scrutiny. (Please forward a hard copy to the School's Research Ethics Officer.)

Signed …… Date ……

Designation …….

Please note: any research protocols lodged with the School Office may be subject to review by the School's Research Ethics Panel.

The School Research Ethics Panel

- ☐ agrees that the research can go ahead as planned
- ☐ requests further information on the research protocol (see details below)
- ☐ requests amendments to the research protocol (see details below)

School REO…… Date ……