



THE UNIVERSITY of EDINBURGH
informatics



Ethics – When, Why, How?

Doing Research in Natural Language Processing
The University of Edinburgh

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26 January 2024

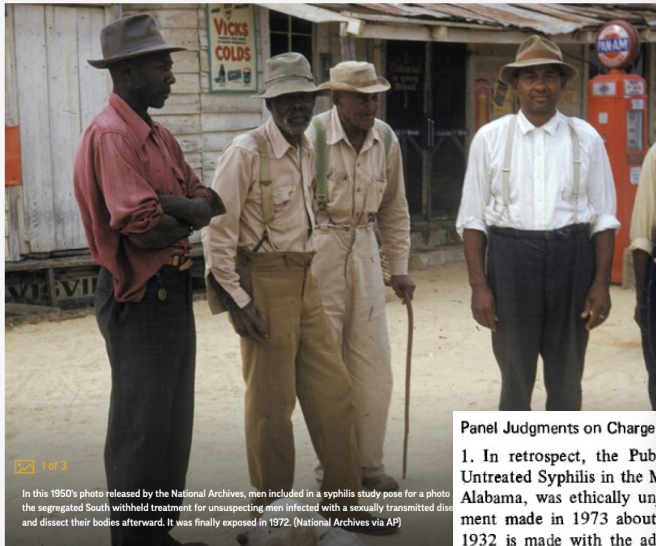
Agenda

- Why ethics?
- What needs ethics approval?
- How do I apply?
- What happens after I have applied?
- Q&A

Why ethics?

AP WAS THERE: Black men untreated in Tuskegee Syphi

By JEAN HELLER May 10, 2017



In this 1950's photo released by the National Archives, men included in a syphilis study pose for a photo in the segregated South withheld treatment for unsuspecting men infected with a sexually transmitted disease and dissect their bodies afterward. It was finally exposed in 1972. (National Archives via AP)

Panel Judgments on Charge

1. In retrospect, the Public Health Service's Untreated Syphilis in the Mississippi Delta study in Alabama, was ethically unjustified. The study was made in 1932 and the advice given to the participants sharpened over some forty years, concerning an activity in a different age with different social standards. Nevertheless one fundamental ethical rule is that a person should not be subjected to avoidable risk of death or physical harm unless he freely and intelligently consents. There is no evidence that such consent was obtained from the participants in this study.

Facebook emotion study breached ethical guidelines, researchers say

Lack of 'informed consent' means that Facebook experiment on nearly 700,000 news feeds broke rules on tests on human subjects, say scientists

Poll: Facebook's secret mood experiment: have you lost trust in the social network?



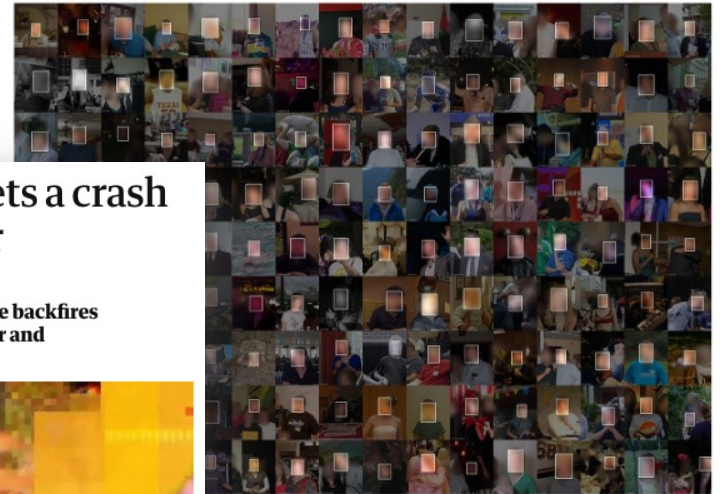
The results found that users' emotions were influenced by the news they saw, a phenomenon called 'emotional contagion'. Photograph: PA Photo

NEWS FEATURE | 18 November 2020

The ethical questions that haunt facial-recognition research

Journals and researchers are under fire for controversial studies using this technology. And a *Nature* survey reveals that many researchers in this field think there is a problem.

Richard Van Noorden



Images which scraped online photos. Images are obscured to protect people's privacy. Credit: Adam Harvey/megapiwels.cc based on Shlitzman et al based on the 'Yahoo Flickr Creative Commons 100 Million' data set and licensed under Creative Commons

Tay, Microsoft's AI chatbot, gets a crash course in racism from Twitter

Attempt to engage millennials with artificial intelligence backfires hours after launch, with TayTweets account citing Hitler and supporting Donald Trump



Tay uses a combination of artificial intelligence and editorial written by a team including improvisational comedians. Photograph: Twitter

Microsoft's attempt at engaging millennials with artificial intelligence has backfired hours into its launch, with waggish Twitter users teaching its chatbot how to be racist.

Researchers wrote to the publisher Wiley to "respectfully ask" that it not publish the paper. The study, published in 2018, had trained algorithms to identify people, a predominantly Muslim minority ethnic group in China, of Tibetan ethnicity⁴.

Why ethics?

(As required by the UKRI, research must be carried out in accordance with all applicable (current or future) ethical, legal and regulatory requirements including but not limited to relevant provisions of the **General Data Protection Regulation**, the **Data Protection Act 2019**, the **Bribery Act 2010**, the **Fraud Act 2006**, the **Equality Act 2010** and the **Modern Slavery Act 2015**.)

All PGRs should follow the Informatics ethics procedures and should be provided specific advice and guidance by their supervisors. *All PhD students are required to complete the research ethics process as part of their first year annual review.* The Informatics ethics process ensures that ethical consideration is taken into account in any research done in the School.

TGC 3 Research Governance

TGC 3.1 Research Ethics, Misconduct and Conflicts of Interest

TGC 3.1.1 You are responsible for ensuring that ethical issues relating to a Student's research activity funded from the Training Grant are identified and brought to the attention of the relevant approval or regulatory body. Before any such work requiring approval begins, approval must have been granted by the relevant body.

TGC 3.1.2 You must follow Our Policy and Guidelines on Governance of Good Research Conduct at: <https://www.ukri.org/about-us/policies-and-standards/research-integrity/> and

ensure that the requirements set out in the Concordat to Support Research Integrity (2012) are met. In particular, You are responsible for ensuring all necessary permissions are obtained before the research activity begins, that there is clarity in roles and responsibilities among Students, Supervisors and any other Third Parties, as well as investigating and reporting unacceptable research conduct. Any potential conflicts of interest in research must be declared to Us and subsequently managed.

Research Ethics, Misconduct and Conflicts of Interest

Ethical issues should be interpreted broadly and may encompass, amongst other things, the involvement of human participants or remains, tissue or data in research, the use of animals, research that may result in damage to the environment, "dual use" research of concern and the use of sensitive economic, social or personal data. Relevant professional codes of practice and ethical guidance provided by professional bodies should be followed. Further guidance on managing the risks of research misuse can be found at: <https://mrc.ukri.org/research/policies-and-guidance-for-researchers/managing-risks-of-research-misuse/>

Research involving human participants or data within the social sciences that falls outside the UK Policy Framework for Health and Social Care Research, such as research which poses no clinical risk or harm to the research subjects, must meet the provisions and guidelines of the ESRC's Research Ethics Framework at: <https://esrc.ukri.org/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/>

UKRI Training Grants
Standard Terms and Conditions and Training Guidance

What needs ethics approval?

Level 0: No application required

- Involves no human participants
- Involves no personal data
- Involves none of the points mentioned under Level 2
- You can still submit an ethics application if your funder / supervisor / ... requires it

Level 1: Reviewed by one member

- Involves human participants or personal data
- Involves none of the points mentioned under Level 2

Level 2: Reviewed by two members

- Involves collecting *sensitive* personal data
- Issues with regards to data protection good practice (e.g. anonymisation and secure storage of personal data)
- No explicit participant consent (e.g. social media data)
- Significant potential for harm – physical or psychological
- Vulnerable participants (e.g. children, disabilities, stigmatised minorities)
- Targeting developing countries (incl. India, China)
- For more, see <https://web.inf.ed.ac.uk/infweb/research/ethics-and-integrity/ethics-levels>

What needs ethics approval?

Level 3: Reviewed by full committee

- Involving extremely vulnerable populations
- Conducted in war zones
- Potentially serious implications for participant welfare

Level 4: Escalated for review at College

- Intention to observe an illegal activity
- Use of materials which are the subject of legal action against the University

What needs ethics approval?

- Consider a research project in your area, e.g.
 - Your Individual Project
 - An influential paper in your field
 - A hypothetical project
 - It has to have human participants or data
- Think about the research methods
 - Will you need existing data? What kind of data?
 - Will you collect new data?
 - Will you have human participants / users / data created by or about humans?

Things to consider: Human participants

- Are you collecting personal data?
e.g. names, student numbers, email addresses, IP addresses, audio/video recordings...
- Are you collecting *sensitive* personal data?
e.g. race, religion, political opinions, sexual orientation, ...
- Do you comply with GDPR? (don't know? take the training!)
- Can the participants understand their rights and provide informed consent? (e.g. are they aged 15 or older?)
- Conflicts of interest

Participant Information Sheet

- Who is conducting the study?
That's you!
- Who is responsible?
That is your supervisor!
- Who can people ask if they have questions?
That's the Ethics panel of the School that has approved the study,
or an external expert
- Can people stop and withdraw from the study at any time?
The only correct answer is YES*

* until you have anonymised the data so that it would no longer be possible to identify the participant

Participant Information Sheet

- Why are you doing this study?
For your PhD project. If your supervisor will also use the data for their research, you must say so, and you must explain what that research is
- What will the study involve?
Describe what they will be asked to do, and how long the study will take
- What are the risks and benefits?
„furthering science“ is too vague
- What will happen to their data?
How will it be analysed? Where will it be presented? How will it be stored? Who will have access?

Things to consider: Data

- If you get data from other sources, do you have permission?
- Does your intended use comply with terms of use?

Relevant for all who work with speech corpora and language data!

- Treat any data carefully and confidentially
- Only collect and process the data you need
- Is it possible for people to be identified? What would be the harm?

Other things to consider

- If you are working with industry partners or academics outside Informatics, is there an agreement about their / your role?
- If (some of) your research takes place outside the UK, is there a requirement for ethics review in those countries?
- Who will benefit from the research? Will you make findings available to participants?

How do I apply?

Ethics application via online form

This is the online form, which has replaced the old Word forms. Please use it for all staff and student projects. Your data is stored on a server in the EU, following GDPR rules. The Principal Investigator will receive a copy of the form.

If you are submitting more than one ethics application, please wait to receive the automated confirmation of receipt for your first application before submitting the next.

Once submitted, the panel will aim to reply within 10 working days.

 [Informatics ethics form](#)

PDF version of form

Here is a PDF version of the form. This is for your information only. Don't worry if it looks long. In the online version, the form branches extensively, so that you don't need to complete parts which are not relevant for you and your project.

 [Informatics ethics form - PDF reference \(93.95 KB PDF\)](#)

You must complete this form online. We do not accept handwritten or edited versions of this PDF.

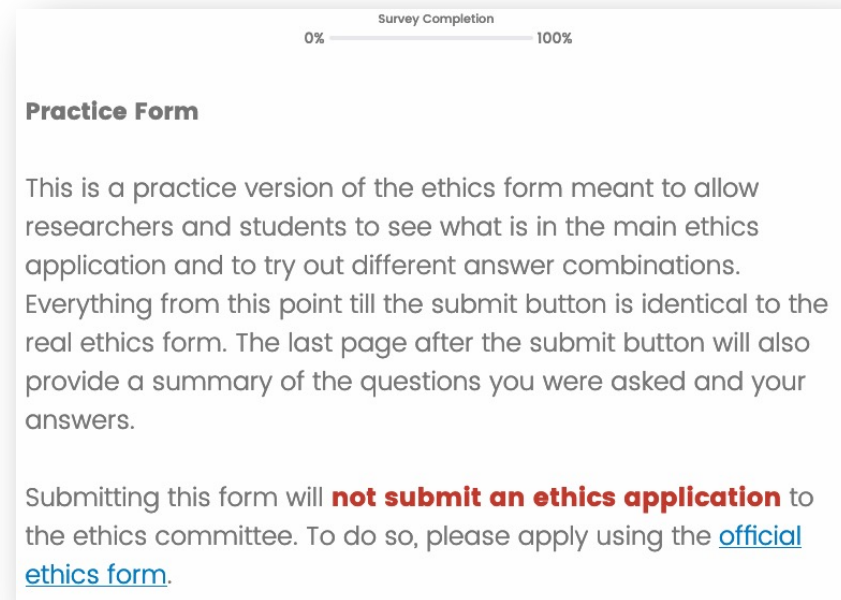
Practice version of form

Here is a **practice version** of the form. **This form is for practice and reference ONLY. Submitting an application via the practice form does NOT submit an application for review by the Ethics committee. You must use the Informatics ethics form above to submit your actual application.**

 [Practice version of ethics form](#)

<https://web.inf.ed.ac.uk/infweb/research/ethics-and-integrity/ethics-procedure>

How do I apply?



0% — Survey Completion — 100%

Practice Form

This is a practice version of the ethics form meant to allow researchers and students to see what is in the main ethics application and to try out different answer combinations. Everything from this point till the submit button is identical to the real ethics form. The last page after the submit button will also provide a summary of the questions you were asked and your answers.

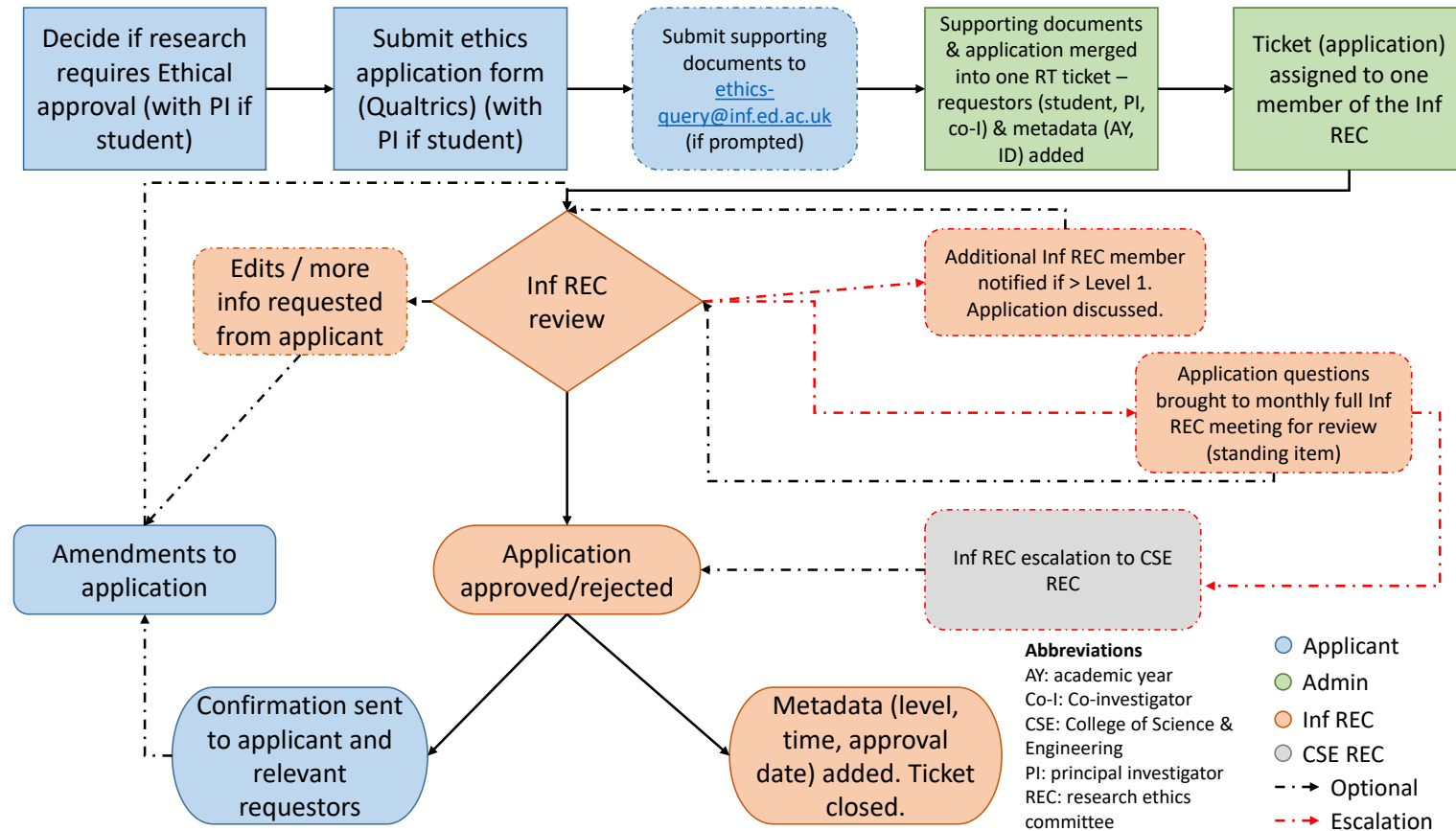
Submitting this form will **not submit an ethics application** to the ethics committee. To do so, please apply using the [official ethics form](#).

https://edinburghinformatics.eu.qualtrics.com/jfe/form/SV_7PvXNZJtMj4HAbk

How do I apply?

- Ask for advice beforehand, if unsure
- Email ethics-query@inf.ed.ac.uk if your question is not addressed in the [FAQ](#)
- Prepare, if relevant, Participant Information Sheet, Consent Form and Data Management Plan, by changing our [templates](#)
- Complete a practice ethics application and forward the completed form to your supervisor; only submit with their approval

What happens after I have applied?



What happens after I have applied?

- Want to make changes? Email us and quote the reference number
- When recruiting participants, always state who has granted ethics approval and quote the reference number
- Application expected to cover the entirety of the project: one application per PhD project usually sufficient
 - Advise ethics committee of changes (e.g. new external partners, new risks) quoting the reference number instead of submitting a new application

Q&A

Your questions..?