



THE UNIVERSITY of EDINBURGH
informatics

Ethics – When, Why, How?

3/11/2025

Informatics Ethics Committee

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The Informatics ethics committee



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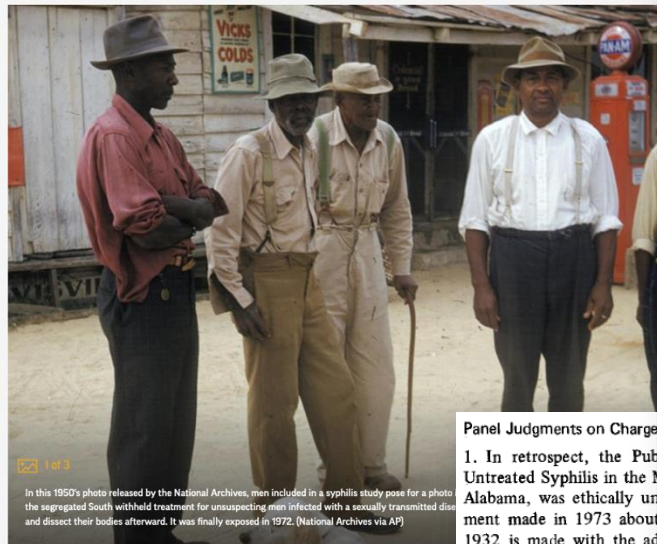
Agenda

- Why ethics?
- What needs ethics approval?
- How do we evaluate applications?
- An example with social media data
- An example of dual use

Why ethics?

AP WAS THERE: Black men untreated in Tuskegee Syphi

By JEAN HELLER May 10, 2017



Panel Judgments on Charge

1. In retrospect, the Publ Untreated Syphilis in the M Alabama, was ethically unj ment made in 1973 about 1932 is made with the adv 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 i called 'emotional contagion'. Photograph: PA Ph

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

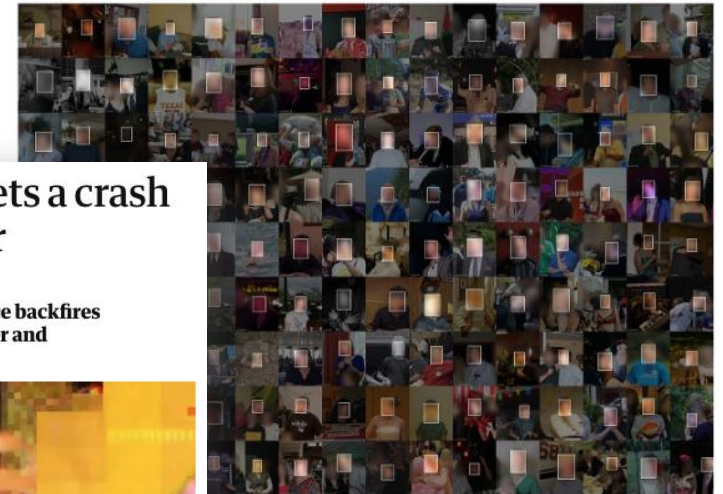
Microsoft's attempt at engaging millennials with artificial intelligence has backfired hours into its launch, with waggish Twitter users teaching its chatbot how to be racist.

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



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

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 ethnicity¹.

Good ethical practice

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Participant Information Sheet

Project title:	[redacted]
Principal investigator:	[redacted]
Researcher collecting data:	[redacted]
Funder (if applicable):	[redacted]

This study was certified according to the Informatics Research Ethics Process, RT number [redacted]. Please take time to read the following information carefully. You should keep this page for your records.

Who are the researchers?

[redacted]

What is the purpose of the study?

The study will carry out participatory design of an online course on data visualisation targeted at professionals (i.e., with work experience beyond study). The overall aim is to ensure the course meets the needs of target participants. We aim to identify key learning goals of a range of participants based on their immediate and future needs for data visualisation at work, and current capability for working with and creating value via data visualisation. The study aims also to identify potential stumbling blocks to study in what will be a relatively short, intense period alongside work, to ensure effective, accessible support is provided to students. This will help us identify and manage factors likely to negatively impact performance or lead to dropout, and increase, rather, adoption of the skills acquired in data visualisation beyond the course.

Why have I been asked to take part?

Participant information sheet

Please tick yes or no for each of these statements.

- I agree to being audio recorded.
- I agree to being video recorded.
- I allow my data to be used in future ethically approved research.
- I agree to take part in this study.

☐	☐
Yes	No
☐	☐
Yes	No
☐	☐
Yes	No
☐	☐
Yes	No

Name of person giving consent	Date dd/mm/yy	Signature
Name of person taking consent	Date dd/mm/yy	Signature

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Consent form

Edinburgh Data Management Plan Template

This template has six sections based on the University of Edinburgh Research Data Management Policy (<http://www.ed.ac.uk/is/research-data-policy>). For each question there is an example question (taken from existing shared plans) and basic University of Edinburgh guidance.

1. Data Capture

What data will be generated or reused in this research?

Guidance

Here you should give a short description of the data you will create, or any third-party data that you plan to reuse.

Consider the types of data your research will generate, for example qualitative survey data, computational models, statistics, measurements, text, images, audio visual data, or samples.

Also consider the longevity of the file formats that you choose. Using open standards so your data can be read by a variety of software makes it easier to preserve and share with others.

If you are reusing third-party data, make sure you have sought appropriate permissions to allow for any data sharing or preservation plans.

Example answer

"Every two days, we will subsample *E. affinis* populations growing under our treatment conditions. We will use a microscope to identify the life-stage and sex of the subsampled individuals. We will document the information first in a laboratory notebook and then copy the data into an Excel spreadsheet. For quality control, values will be entered separately by

Data management plan

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

These levels are very rare – talk to use before considering doing such research!

What needs ethics approval?

- A research project level 1 and over
- Student project at time of project definition – UG and MSc projects have a deadline
- Staff at funding proposal stage if level 2 – high level lightweight application, can update application with details when research begins
- 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

Things to consider: Personal 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?
- Has the research been reviewed in other countries, if (some of) it takes place outside the UK?
- Who will benefit from the research? Will you make findings available to participants?

Scenario

Research Project:

Post prison influence of high profile twitter users

We want to study how users of social media platforms change their behaviour before and after going to prison. We create a list of high-profile users and we gather the timelines of users which have interacted with them before, and after they went to jail. This involves gathering their tweets, retweets, and quotes. We then use hate-speech detection tools, topic modelling techniques to analyse the differences.

Aspects to consider: privacy, consent, terms of service

Scenario

- Scenario: Ana graduated in quantum computing, and now works at a start-up creating quantum cryptography. These methods are safe against attackers with quantum computing capabilities, but are hard to understand. The device they produce uses open source software. She would like to convince the UK government to use her company's services. What issues should she consider in her presentation?
 - Aspects to consider: privacy, dual use, export controls, intellectual property