

# Ethics

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# Announcements

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- ▶ The first draft of your written piece is due on Friday.
- ▶ Submit to File Exchange for your group on Blackboard.
- ▶ First review session is on Monday.

# Industrial Action

The union of University and College lecturers (UCU) has called a 14-day nation-wide strike. (61 universities affected including UoM. More to be balloted.)

**The dispute:** Cut pensions by as much as £10K per year, £200k per life.

**Pension firm (USS):** Claims a £12.6B deficit.

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## How this affects this class

The following are strike days:

- ▶ Feb 26 - Review Session 2.
- ▶ Feb 28 - Review Session 3.
- ▶ March 7 - Wrap up lecture

Both lecturers intend to strike as long as the strike continues.

# Proposal

- ▶ At the first review session (Monday Feb 19), you see how a review session should be run.
- ▶ Review sessions 2 and 3 are self-run, by you. (Attendance is taken.)
- ▶ March 7 lecture is cancelled.

Comments?

# Discussion of Simon Peyton Jones's talk

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What did you think?

(Discussion)

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What were his seven points to writing a great paper?

1. Don't wait: write
2. Identify your key idea
3. Tell a story
4. Nail your contributions
5. Related work: later
6. Put your readers first (examples)
7. Listen to your readers

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# The importance of the Introduction

- ▶ Simon Peyton Jones spoke about this; it has your highest audience.
- ▶ We have an assignment on Blackboard under TASKS on writing introductions: <http://www.cs.man.ac.uk/~bparsia/2017/introexercise/>

# Ethics



Figure: By Ji-Elle - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=15184456>

# Ethics and Computer Science

- ▶ What are the issues around Ethics and Computer Science?
- ▶ **Take 5 minutes and write down your thoughts**
- ▶ Share with your table.

# My list (influenced by Wright 2006)<sup>1</sup>

**While doing your research:** mitigate harm to others.

**The outcomes of your research:** be aware of effects on others.

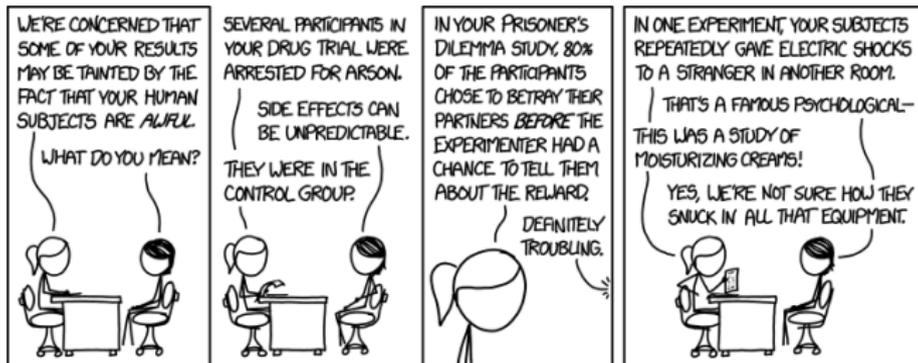
**Carry out the research responsibly:** Claim only what you know to be true and can fully support.

**Report in full:** the procedures, results, and analyses, including those which go against your desired conclusions.

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<sup>1</sup>Research Ethics and Computer Science: An Unconsummated Marriage, SIGDOC'06.

# Research on living subjects



from [http://imgs.xkcd.com/comics/human\\_subjects](http://imgs.xkcd.com/comics/human_subjects) under Creative Commons Attribution-NonCommercial 2.5 License

# Research on living subjects

(You probably know this)

- ▶ If you use humans or non-human animals in your research, ***you must get “ethical approval”***.
- ▶ It is usually easy to do, using  
<http://www.staffnet.manchester.ac.uk/services/rbess/governance/ethics/>

# Nuremberg Code 1947

- ▶ Research must balance expected benefits against risks to those involved.
  - ▶ E.g. medics should do no harm; but ...
  - ▶ Perfectly healthy subjects are given unnecessary drugs during clinical trials.

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## Nuremberg Code — 10 Standards

1. The voluntary consent of the subject is absolutely essential.
2. The study should yield fruitful results for the good of society, unprocurable by other means.
3. The study should be designed and based on results from animal experimentation and knowledge of natural history, such that the anticipated results justify the performance of the experiment.
4. Experiment should be conducted to avoid all unnecessary physical and mental suffering and injury.
5. No experiment should be conducted if there is prior reason to believe that death or serious injury could occur.

## Nuremberg Code — 10 Standards

6. The degree of risk should never exceed that determined by the humanitarian importance of the problem to be solved.
7. Proper preparations should be made to protect the subject against injury, disability or death.
8. The experiment should only be conducted by scientifically qualified persons.
9. The human subject should be at liberty to bring the experiment to an end.
10. During the experiment the scientist must bring it to a close if there is probable cause to believe that it could result in injury, disability or death.

# Typical use of humans in computer science research

- ▶ User surveys;
- ▶ Subjective assessment;
- ▶ HCI evaluation;
- ▶ Virtual reality experiments.
- ▶ Real-time social network data.
- ▶ Mobile device data.

These generate data.

# Data Protection Act (1998)

This is a complex act<sup>2</sup>, but roughly, it protects,

**Personal data:** defined as data with which a living individual can be identified,

**Consent:** Except under certain exceptions, the person whose data is being processed has certain rights, including the requirement that they consent to the data's use, and assurance that it is not misused.

**Use:** Cannot be used except for the original agreed use.

In addition to being a legal issue, it can be viewed as an ethical one.

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<sup>2</sup>there is a training course on it, see My Training and Development on eProg

# Harming individuals in a collective

Measuring quality of Open-Source Software — Can harm one or more contributors. (See, e.g. Vinson and Singer, Emp Soft. Eng. 2001).

Analysis of social media data — Can break anonymity/privacy of some individuals.

Use of proprietary data or algorithms — May need to be protected against revealing its origin, or it being hacked or stolen.

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# The practice of research

**Carry out the research responsibly:** Claim only what you know to be true and can fully support.

**Report in full:** the procedures, results, and analyses, including those which go against your desired conclusions.

**Remember:** your reputation is the most valuable thing you have as a researcher.

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# Academic malpractice/Scientific misconduct

## 5-minute exercise

- ▶ Write down examples of Academic malpractice/Scientific misconduct that you can think of or have heard about.
- ▶ Discuss with the rest of your table
- ▶ Be prepared to share with the class



## Some I have thought of

1. Conscious falsification of results.
2. Plagiarism of ideas or results — claiming the ideas or results of others as your own.
3. Plagiarism of words — claiming the words of others as your own.
4. Selecting only the results which support your hypothesis.
5. Failure to report conflict of interests, such as sources of funding.
6. Discovering an error in a submitted or almost submitted paper, and submitting it anyway to meet a deadline.
7. Any claims you don't know to be true, but act as if you do.
8. Publishing the same work multiple times.

# Citation games

# Citation games

9. Omitting citations of your rival.
10. Overly citing irrelevant work of a predicted reviewer/examiner.
11. Forming mutual citation clubs to get your citation count up.
12. Aggressively citing yourself and insisting that papers you are refereeing cite your work.
13. Citing work you haven't read as if you know its content.
  - ▶ This spreads misinformation.
  - ▶ Never cite a work which you have not read.
  - ▶ Question: What percentage of people who cite the "Turing Test" paper<sup>3</sup> have actually read it?

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# Honesty

If you are going to do bad science, at least be honest about it

- ▶ <https://imgur.com/gallery/yPH3k>
- ▶ Thanks to Dave Corne through Josh Knowles for this.

# The biggest issue of all

Think of the consequences of your research on the wider world.

- ▶ Computer science potentially touches society at large.
- ▶ Consider whether the result of your work has the potential to harm people, remove their privacy, security, safety, employment, and so forth.