

# COMP 516

## Research Methods in Computer Science

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1 / 22

### Best presentation award: Honourable mentions

<b>Ahmad Omar</b>	Viability of Telecommuting in Today's Society
<b>Oliver Owens</b>	Understanding Denial Of Service attacks and the strategies to defend against them successfully
<b>Claire Parker</b>	Protecting Against Cross-Site Scripting Attacks

3 / 22

# COMP 516

## Research Methods in Computer Science

### Lecture 21: Best Presentation Award and Final Tips

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2 / 22

### Best presentation award: The main prize

<b>Paul Owen</b>	The use of internet health information for self-diagnosis: A help or a hindrance?
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4 / 22

## Feedback on presentations

- No need for full sentences
- Don't put too much text on a slide
- Timing: some of you spent too much time describing the background
- It was very important to **explain your research question**
- Use simple direct language
- Often, **less is more**

5 / 22

## Feedback on bibliographies

- Given a source, **categorize it**: journal, conference paper, book etc.
- Make sure all the bibliographic data is included
- Choose an appropriate style and then ...
- ... make sure bibliographic entries are presented **consistently**
- for web pages, make sure that the access date is the actual date **you accessed the web page, not when someone else did**

6 / 22

## 3,000 word Essay

- submit via VITAL TurnItInUK Assignment
- deadline moved to **11th Dec (Tuesday) 6pm**, because of a clash with COMP518 assignment
- it will be checked automatically against plagiarism and collusion

7 / 22

## Polishing Your Essay

- **Our goals**  
**Clarity, coherence, authority, and readability**
- Keep sentences short
  - Keep your sentences 15-20 words long on average
  - Rule of thumb: **only two lines for a sentence**
  - Use only one idea in a sentence
- Prefer the simple to the complex
  - Go for simplicity in writing: **simple words and simple ideas**
  - The **KISS** principle, **Keep It Simple and Straightforward**
- Think of unnecessary words as redundancies

8 / 22

## Weasel words

Words that sound good without conveying information; they obscure precision.

[http://en.wikipedia.org/wiki/Weasel\\_word](http://en.wikipedia.org/wiki/Weasel_word)

- salt and pepper words
- beholder words
- lazy words

9 / 22

## Salt and pepper words

Look and feel like technical words, but convey nothing.

Examples: various, a number of, fairly, quite, ...

**Sentences that cut these words out become stronger**

- **Bad:** It is quite difficult to find untainted samples.
- **Better:** It is difficult to find untainted samples.
- **Bad:** We used various methods to isolate four samples.
- **Better:** We isolated four samples.

10 / 22

## Beholder words

Make judgements on behalf of the reader.

**Examples:** interestingly, surprisingly, remarkably, clearly

- **Bad:** False positives were surprisingly low.
- **Good:** To our surprise, false positives were low.
- **Even better:** To our surprise, false positives were low (3%).

11 / 22

## Lazy words

Are inserted to avoid making a quantitative characterization.

Make the science feel infirm and unfinished.

**Worst offenders:** very, extremely

**Never use these in technical writing**

**More examples:** several, exceedingly, many, most, few, vast

- **Bad:** There is a very close match between the two semantics.
- **Better:** There is a close match between the two semantics.

12 / 22

## Adverbs

In technical writing, adverbs tend to come off as weasel words.

- **Bad:** We offer a completely different formulation of CFA.

- **Better:** We offer a different formulation of CFA.

The right frame of mind: 'Less is more'

13 / 22

## Passive voice

Is bad when it hides relevant or explanatory information.

- **Bad:** Termination is guaranteed on any input.  
(hides relevant information)

- **Good:** Termination is guaranteed on any input by a finite state-space.  
(includes the relevant information, but misplaces the emphasis)

- **Even better:** A finite state-space guarantees termination on any input.  
(contains all the relevant information, and it feels crisp)

14 / 22

## Lexical illusions

Read the following text:

```
Many readers are not aware that the
the brain will automatically ignore
a second instance of the word "the"
when it starts a new line.
```

Read that same text again, but with different line breaks:

```
Many readers are not aware that the the
brain will automatically ignore a second
instance of the word "the" when it starts
a new line.
```

Duplicating words is a phenomenon of electronic composition.

15 / 22

## Final tips

- Have a break before you try to polish your essay.
- Read it slowly, and force yourself to think like a reader.
- If English is not your mother tongue, [read it aloud](#).
- Finally, give it to someone else to read

References <http://www.csun.edu/~vcecn006/jargob.html>

16 / 22

<http://www.csc.liv.ac.uk/~leszek/COMP702/#writing>

- Each slide corresponds to advice from a different member of faculty.

17 / 22

- remind listeners of big picture (before starting on technical details)
- include both high-level information (aims of the project etc.) and sufficient technical detail
- don't spend presentation explaining why the project is hard  
(and making excuses for not doing a better job)

18 / 22

- consider the audience when preparing the presentation
- bad presentations are usually bad because  
the presenter has not thought much about what the audience knows or remembers
- or how much time and attention they have to give, or how much background knowledge they need

19 / 22

- common to assume that audience members remember everything from one presentation to the next
- Much better:  
start each subsequent presentation with a gentle reminder of what the project is about
- Key skill = **empathy**  
being able and willing to consider the perspective and position of the audience members  
(who may, e.g., have many presentations to assess)

20 / 22

- don't just use bullet points
- introduce each subsection, table etc. with some text
- try not to be too vague
- reflect on what you have done

- <http://www.liv.ac.uk/study/postgraduate/research/faculty-of-science-and-engineering/school-of-electrical-engineering-electronics-and-computer-science/computer-science-mphil-phd/overview/>
- <http://cgi.csc.liv.ac.uk/~pwg/2012-studentships.htm>