

COMP 516

Research Methods in Computer Science

Dominik Wojtczak

**Department of Computer Science
University of Liverpool**

COMP 516
Research Methods in Computer Science
Lecture 21: Best Presentation Award and Final Tips

Dominik Wojtczak

Department of Computer Science
University of Liverpool

with material from Ullrich Hustadt and Rahul Savani

Best presentation award: Honourable mentions

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

Best presentation award: The main prize

Paul Owen

The use of internet health information for self-diagnosis: A help or a hindrance?

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

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

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

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**

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**

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**

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**

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**

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**

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

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**

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

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

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

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

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

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

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

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

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

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

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

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

Weasel words

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

http://en.wikipedia.org/wiki/Weasel_word

- salt and pepper words

- beholder words

- lazy words

Weasel words

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

http://en.wikipedia.org/wiki/Weasel_word

- salt and pepper words
- beholder words
- lazy words

Weasel words

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

http://en.wikipedia.org/wiki/Weasel_word

- salt and pepper words
- beholder words
- lazy words

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.

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.

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.

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.

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.

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.

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.

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%).

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%).

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%).

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%).

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%).

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.

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.

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.

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.

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.

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.

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.

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'

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'

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'

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'

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'**

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)

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)

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)

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)

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.

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.

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.

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>

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>

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>

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>

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>

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>

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

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

- 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)

- 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)

- 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)

- 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)

- 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

- 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

- 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

- 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

- 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)

- 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)

- 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)

- 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)

- 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)

- 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)

- 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

- 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

- 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

- 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>

- <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>