CSC3031 Research and Project Skills: Presentation Skills

Simon Bowen

Updates

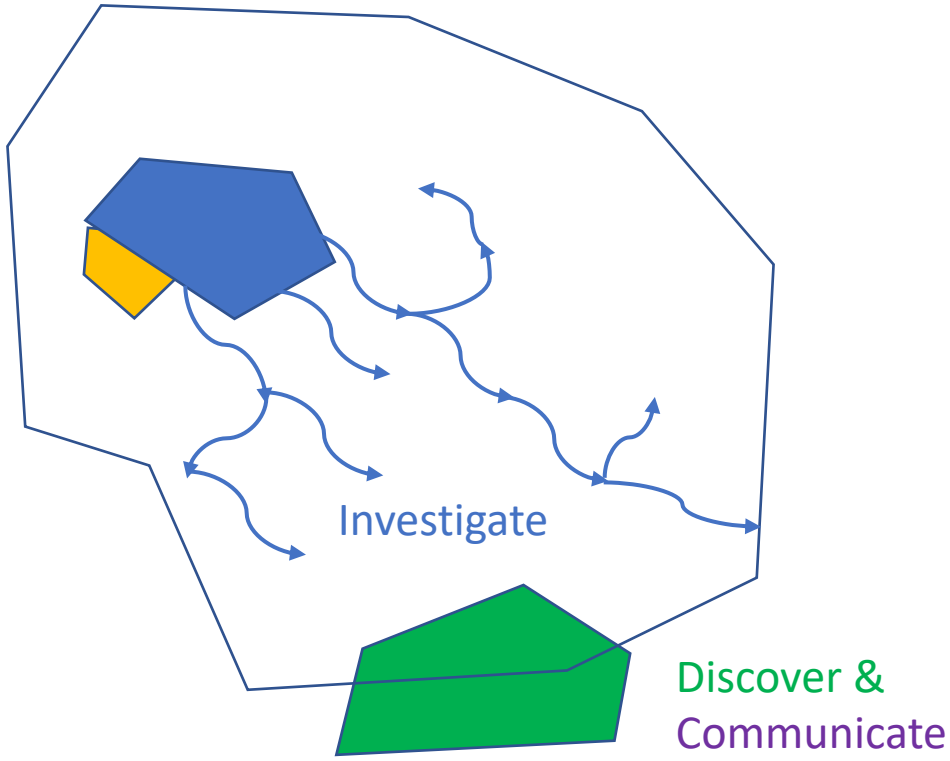
- Tutorial slots - Info/links here.
- CSC3031 FAQs

Aims

- The role of project presentations in communicating research
- What makes a good (research) presentation
- The Presentation assignment

Recap: research is…

- Investigation
- Discovery
- **Communication**
- Integration



Why present research?

- Inform
- Get feedback
- Promote or sell
- Demonstrate
- Promote
- Inspire
- Interest others in your work
- Prove authorship
- Contribute to the field

presentation

research

https://commons.wikimedia.org/wiki/File:Iceberg.jpg

Presentations - initial considerations

- Objectives – What do you want to communicate? For what purpose?
- Audience – Who are you talking to? How many people?
- Time – How long do you have? Including/excluding questions?
- Resources – What visual and auditory aids can you use?

What makes a good presentation?

Good presence and preparation:

- Your attitude
- Adapting to the audience and venue

Good slides (or other visual and auditory aides):

- Understandable
- Engaging and interesting

Adapted from slides from Marcus Kaiser, Thomas Ploetz, Jiaheng Lu

Know your topic

- Be prepared to get questions!
- “What if I don’t know the answer?”
  - Know WHEN and HOW to say “I don’t know”
- Be able to recover from interruptions
- Know what to skip if you’re running late (don’t just talk faster!)

Know your audience

- Do they have a background like yours?
  - General public, similar field, subject experts?
- How much hand-holding?
- Can you jump right in to specifics?
- How detailed should you get?

Know your location

- Laptop/PC provided or bring your own?
- Bring presentation resources with you (removable device, Cloud) or send in advance?
- How far is audience from screen?
- Do you need a stable Internet connection? (Can you survive without?)
- Can you point with your hand, or do you need a laser pointer?

Your attitude

- Demonstrate your interest in the topic
  - If you aren't interested, how can others be?
- Tone – don't talk down to your audience
  - You might be the expert here, they are experts elsewhere
- Mannerisms, try to avoid:
  - Hiding behind the podium. Being too still. Staring at one place. Having your back to the audience.

Dealing with.. um.. problems or ..er.. losing your place

- Practice makes perfect (Caveat: OVER practicing can be bad…)
- Don’t read your slides like a script
- Most people lose 20 IQ points in front of an audience
- If in doubt: take a breath, slow down, stop/start again.

Slide design

Goals:

- Convey the necessary information
- Be readable / understandable
- Be interesting (enough)

Avoid:

- Over stimulation / information overload
- Being dull and boring

Some general considerations

- Allow ~ 2 minutes per slide (#slides = presentation duration/2)
- Slide numbers useful for questions later
- Slides (PowerPoint, Keynote, Google Slides, LibreOffice Impress etc.) are not the only way…
  - https://prezi.com/ (demo)
  - https://www.mural.co/
  - https://miro.com/

Examples

Example Presentations Page

- student1.pdf
- student2.pdf

- What works well?
- What could be better?

Presentation structure

- Beginning
  - Title slide – who are you, what you'll talk about, logos/names of partners or collaborators
  - Agenda or outline of what's coming up
  - Introduction to the topic
- Middle
  - The main content – what you did, what you discovered, a demonstration
- End
  - (for longer presentations) Bring people back, reminder of main conclusions
  - Summary of 'take homes' or the selling points
  - References, contact details, (questions)

(Don’t become a) Readme.txt

- Do not attempt to put all the text, code, or explanation of what you are talking about directly onto the slide, especially if it consists of full, long sentences. Or paragraphs.There’s no place for paragraphs on slides. If you have complete sentences, you can probably take something out.
- If you do that, you will have too much stuff to read on the slide, which isn’t always a good thing.
- People do not really read all the stuff on the slides
  - That’s why it’s called a “presentation” and not “a reading” of your work
- Practice makes perfect, which is what gets you away from having to have all of you “notes” in textual form on the screen in front of you.
- Utilize the Notes function of PowerPoint, have them printed out for your reference.
  - The audience doesn’t need to hear the exact same thing that you are reading to them.
  - The bullet points are simply talking points and should attempt to summarize the big ideas that you are trying to convey
- If you’ve reached anything less than 18 point font, please:
  - Remove some of the text
  - Split up the text and put it on separate slides
  - Perhaps you are trying to do much in this one slide?
- Reading a slide is annoying.
- You should not simply be a text-to-speech converter.

This is a really long title for this single slide, I should have just summarized

- Hard to read
- Many people don’t read the title anyway
- Should have been “Long Slide Titles”
- Could use main message as the title

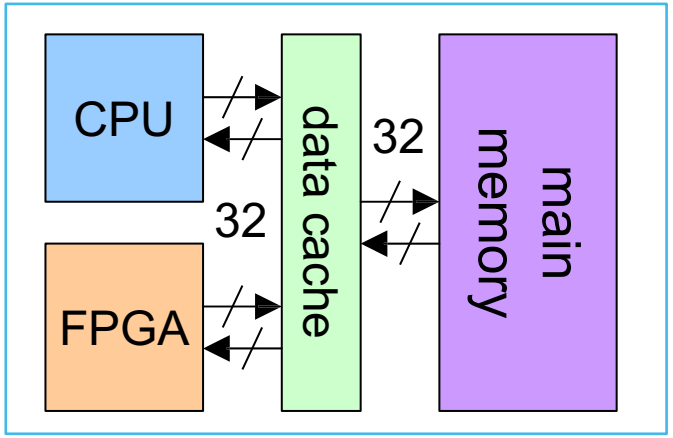
Diagrams and Illustrations

- Try to avoid too many text-only slides
- Well-drawn diagrams and illustrations can communicate complex concepts better

System Architecture:

✡There's a CPU, a RAM and an FPGA and they're all connected
  - The FPGA connects to the CPU's data cache
  - The bus is 32 bits wide
  - Blah blah blah blah

✡You have to visualize it yourself



Colour and Contrast

- Eye comfort – could you look at something for 45 minutes?
- Colours can look different on every projector / screen
- Sans-serif fonts are easier to read
  - (and many people hate this font)
- Give your slides good contrast
  - (Most) projectors have lower contrast than monitors

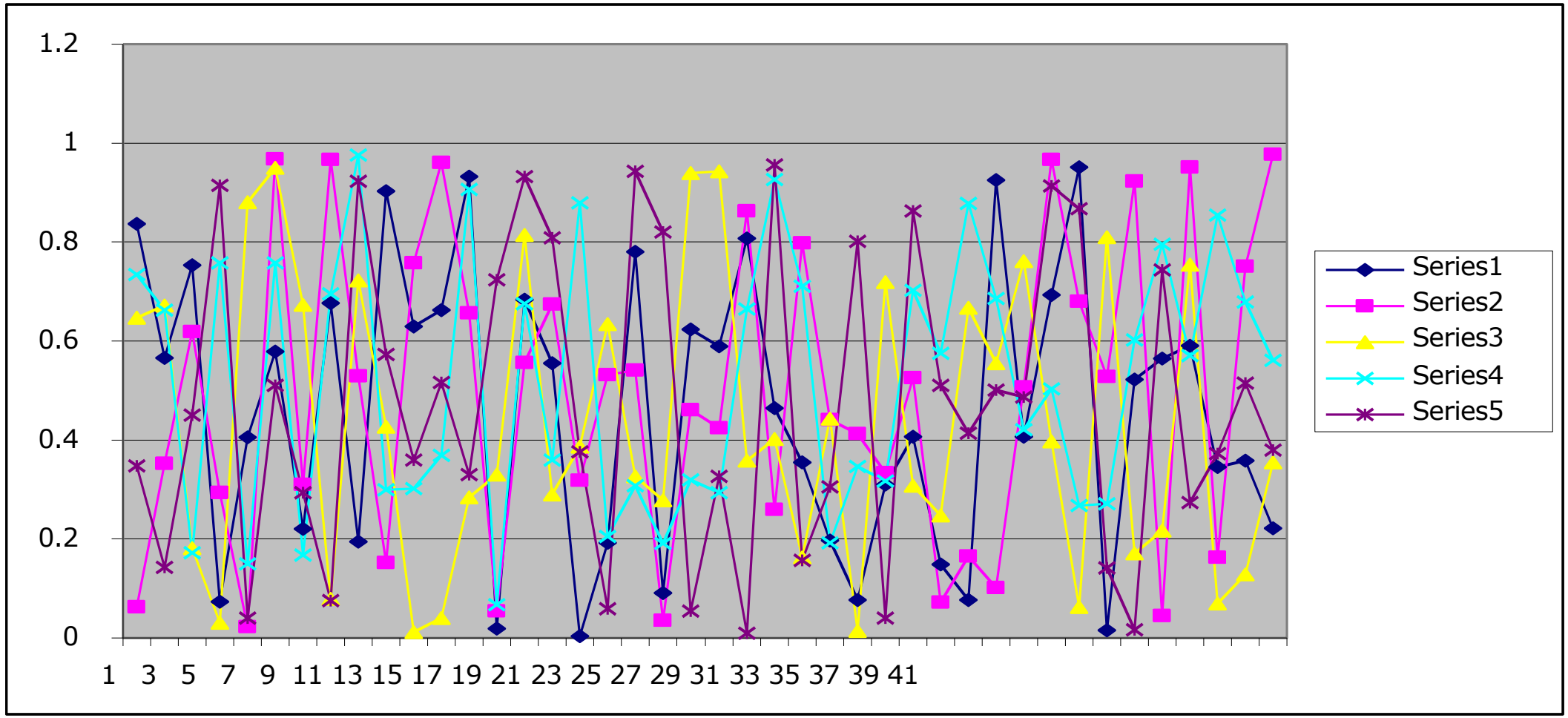
Quantitative Results

You have lots of great results, but:

- No one can read this
- No one can understand this
- Graphs are your friend!

A	B	C	D	E
0.78799174	0.87677244	0.99348605	0.23781547	0.24437526
0.24910355	0.79708654	0.39825661	0.4894876	0.22079456
0.65729261	0.46901063	0.36471191	0.04697233	0.63468059
0.48205396	0.52657506	0.70503426	0.35280176	0.40935313
0.46328137	0.0774365	0.71517444	0.9394662	0.46843638
0.09762717	0.70884867	0.81407539	0.24571711	0.72497819
0.00773315	0.39906447	0.42344939	0.90776976	0.22209006
0.15857663	0.4181197	0.56488165	0.91405841	0.3578349
0.59242455	0.17894389	0.61926672	0.02978346	0.50789172
0.41285757	0.71470398	0.31906988	0.79658426	0.21587647
0.8855586	0.46534556	0.3701164	0.12452538	0.33415497
0.28231467	0.17509894	0.85801024	0.72984635	0.94731238
0.82370951	0.03235362	0.95622299	0.27726297	0.76619879
0.86245578	0.21094811	0.93272287	0.48265505	0.04960646
0.38953201	0.3665743	0.33754918	0.28178635	0.39637009
0.80522838	0.63509032	0.43333321	0.97677807	0.96198172
0.35928212	0.14878634	0.44201417	0.23251612	0.83375154
0.72099806	0.75212293	0.81061259	0.23756284	0.48518996
0.13329065	0.31602317	0.87489249	0.5304632	0.26191565
0.2588109	0.89039838	0.81380512	0.59139955	0.48488759
0.99314419	0.34635186	0.73292414	0.25933239	0.29230491
0.88041055	0.11473455	0.01934078	0.15717245	0.93780676
0.72332226	0.80195173	0.1792961	0.07832254	0.41154579
0.95925002	0.41696749	0.24905812	0.2111233	0.00256536
0.00580885	0.65322119	0.49666074	0.91641276	0.40573275
0.26004883	0.3010126	0.45604195	0.99935168	0.91271048
0.1508427	0.84418604	0.96241158	0.05548096	0.94093154
0.63750743	0.08979734	0.11100042	0.34646613	0.09994533
0.17176871	0.85518113	0.94522781	0.29368901	0.77444161
0.15186964	0.53105474	0.69991523	0.07876247	0.0023978
0.72306385	0.73755246	0.71402806	0.68090612	0.76015636
0.42140074	0.39036871	0.02247591	0.94725973	0.70692042

Not all graphs are good!



Presentations in a nutshell

- Be prepared

Structure:

- Beginning – “Tell them what you’re going to tell them”
- Middle – “Tell them”
- End – “Tell them you told them”

CSC3031 Presentation Assignment

~10-minute presentation covering:

- What is the project about?
- What are the project's aims (or hypothesis) and objectives?
- How do you propose to tackle it?
- What are your plans for the project?

A video recording – slides plus your voice over

You will be marked on the quality and content of the presentation

What is the project about?

- The context – technical, real-world
- Problem or opportunity
- Why is this interesting and/or important?
- An example or illustration

What are the project's aim/hypothesis and objectives?

- Your aims and objectives as you begin your project
- What you want to achieve, how you plan to get there
- (remember, they might evolve)

How do you propose to tackle it?

- What technologies and software will you use?
- What might you build or design?
- What research methods will you use?
- Any risks you have identified so far, and how you would tackle them
- How will you evaluate your objectives ?

What are your plans for the project?

- What are your main tasks and milestones?
- How will you organise these tasks? (work breakdown structure?)
- What software development process you will use (if applicable)?

Questions?

- Dawson, (2015) Projects in Computing and Information Systems - Chapter 9, section 9.2 Oral Presentations pp 240-253