Research Seminar

session 7

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For next week

Your task will be to prepare and give a talk
presenting a research paper

For those of you taking the class for credit,
you need to do it, so raise your hand!

Also raise your hand if interested in doing the exercise.

More details later in the class

Giving a talk

Know your audience

What do they know?
   Shared jargon, assumptions, methods …

What do they expect to hear?

Who is your audience?

Research topic:

Research group	Specialists with shared context
Specialized conference	Specialists with less shared context
Main conference	Mix of generalists and specialists
Computer Science Dept.	Mix of generalists and specialists
Research magazine	Technical generalists
General public	Non-technical generalists

Who is your audience?

Design topic:

Users	Subject matter experts
Design group	Peers
Company management	Decision makers
Venture capitalists	Funders
General public	Non-technical

What is the venue?

Setting	Type	Length	
Formal	Conference	15-20	minutes
Intermediate	Class	1-3	hours
	Corporate meeting	15-60	minutes
	Doctoral consortium	15-45	minutes
Informal	Workshop	5-10	minutes
	Poster session	2-3	minutes
	Fêtes de la Science	1-3	minutes

Talk length

If it is your own work:

5 minutes	Hard
10 minutes	Very Hard
20 minutes	Easier
60 minutes	Easiest

When you travel (conferences, workshops)
   be prepared to give a 2- and a 5-minute
     summary of your work (besides your conf talk)

Other types of talks

Short talks: Masters thesis
    Keep it simple!   Workshops, Posters
    Find a key take-home message
    Eliminate extra discussion
    Prepare backup slides and questions

Long talks: Job talks, Ph.D. defense
    Tell an overall story
    Go into depth at least once
    Prepare backup slides and questions

Other ways to present your work

Give a demo
- conferences, lab visits, university events, science fairs
  (prepare script for these as well! Don't wing it)

Online videos
- conference videos, Youtube, lab/personal websites
  (same, prepare and script dialogue and interaction sequence)

Research Blogs and webcasts
- lab or personal

Social networks

Talk to people in conferences and events !!!

Creating Slides

Conference talk: 12-15 slides, 20 minutes max

Slides	Content
1	Title/author/affiliation
1	Talk outline (optional)
1-2	Motivation / problem statement
0-2	Related work
1	Approach
4-6	Main body of talk, including results
1	Summary
0-1	Future work & open questions
0-3	Backup slides to support expected questions

Internship talk: 7-10 slides, 10-15 minutes

Slides	Content
1	Title/author/affiliation
1	Motivation / problem statement
0-1	Related work (good for internship)
0-1	Approach
2-3	Main body of talk, including results
1	Summary
0-1	Future work & questions
0-3	Backup slides to support expected questions

timing ~ 1-1.5min per slide
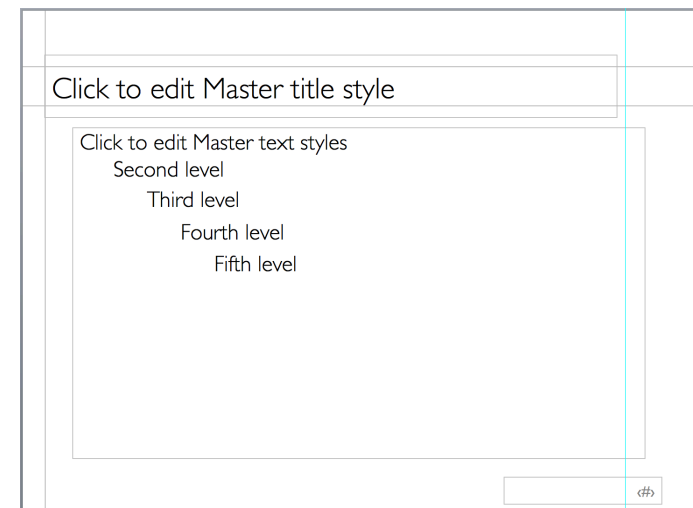(not counting title + animated slides)

… but everyone is different, so practice !!!

Slide formats

Choose a simple slide format
    reuse it for different talks

Standard powerpoint/keynote formats
    are often complex and ugly

Consider creating a personal slide format
    standard title slide (with logos)
    numbering scheme

Click to edit Master title style

Click to edit Master text styles
    Second level
        Third level
            Fourth level
                Fifth level

Choose slide text carefully

Should help the **audience** follow what you say
   they cannot go back and reread what you said!

Should help **you** remember
   keywords act as cues to trigger what to say

Avoid distracting the audience
   do not cover the text that appears on the slide
   do not just talk about something else

Adjust the words to match the audience's level
   define any jargon words

Slide content

Text

Limit to key points

Maximum: two levels of hierarchy

Color

Limited palette, use color to highlight

Careful: Red recedes Yellow disappears

Contrast

Dark text on bright background

(Easier to print, easier to see)

Font

Serif: **Times new roman**

Sans serif: **Helvetica Arial**

Font size

Minimum size: 20 points

Usual size: 24 points

Career Seminar-Lecture 7 - 12 November 2020

Slide layout

Frame   Avoid placing content at the edges:
                                               text may disappear

Transitions   Avoid special effects
                     (mostly distracting and unprofessional)

Line length   Use a 'soft return' to break each phrase
                     at the most logical point

Figures   Use figures/images/video to convey ideas

Graphs   First, label and read the axes when presenting
                     (the audience will try to figure this out
                     and will ignore anything you say)
         Then, explain what the graph means

Describe each graph

ALWAYS explain how to read the graph:

First, read the labels
    x-axis, y-axis (could animate)

Then, explain the graph.
    what is good? what is bad?
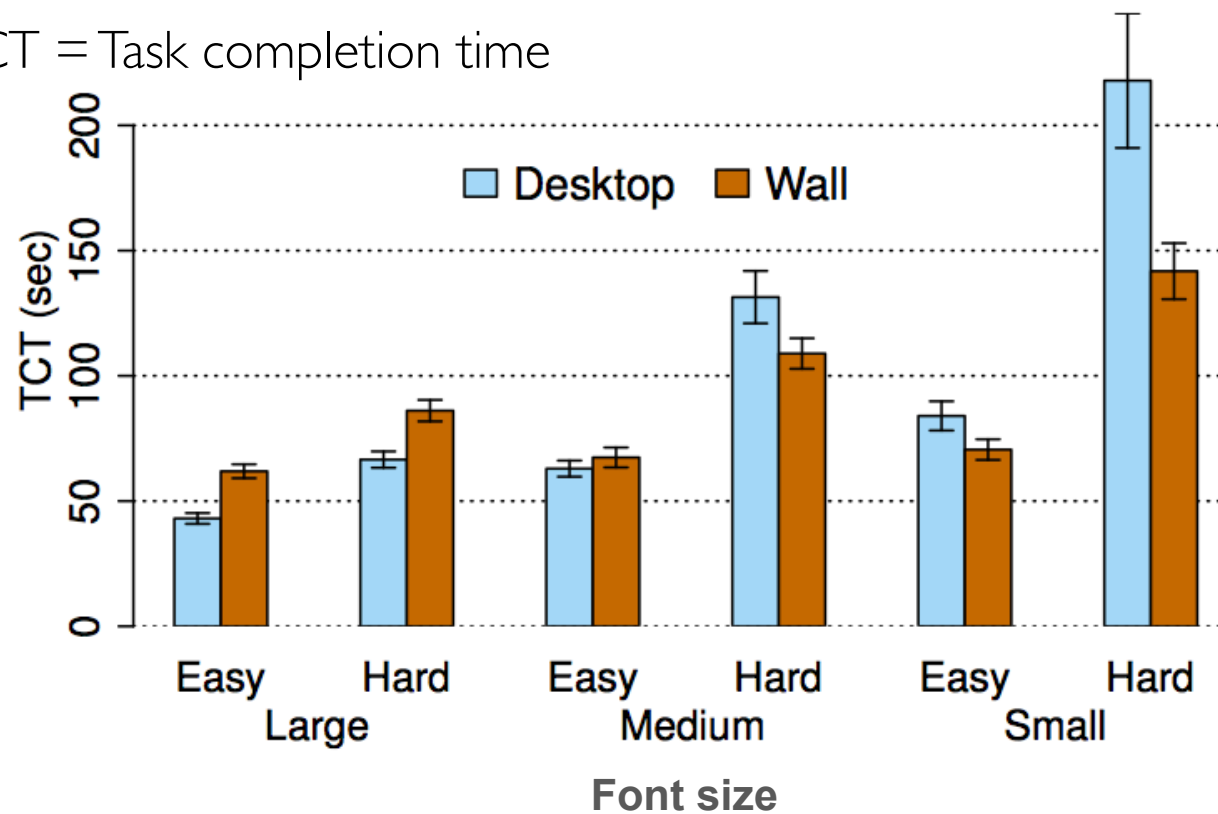   highlight important points

Then, talk about the result
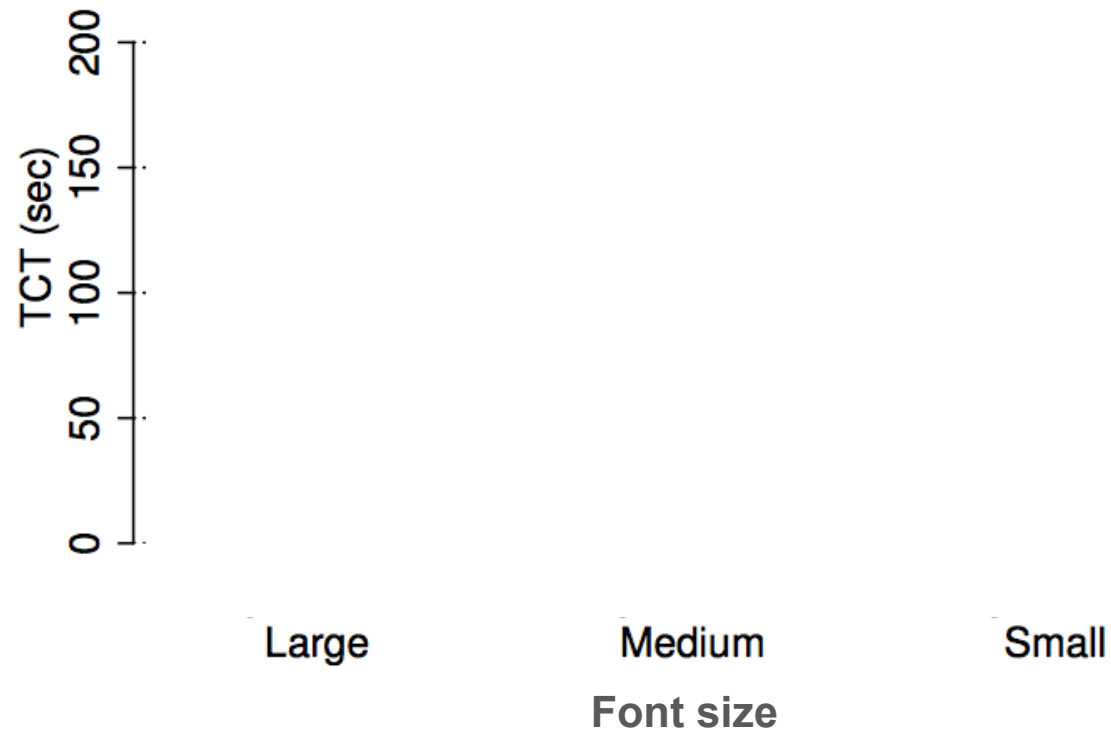   if you jump ahead, the audience will not hear you

Describe each graph

Wall display is significantly faster than desktop
   for difficult tasks (what are the important aspects, missed here ...
   highlight!)

TCT = Task completion time

Describe each graph

Wall display is significantly faster than desktop
for difficult tasks (what are the important aspects, missed here …
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(how to build it up)

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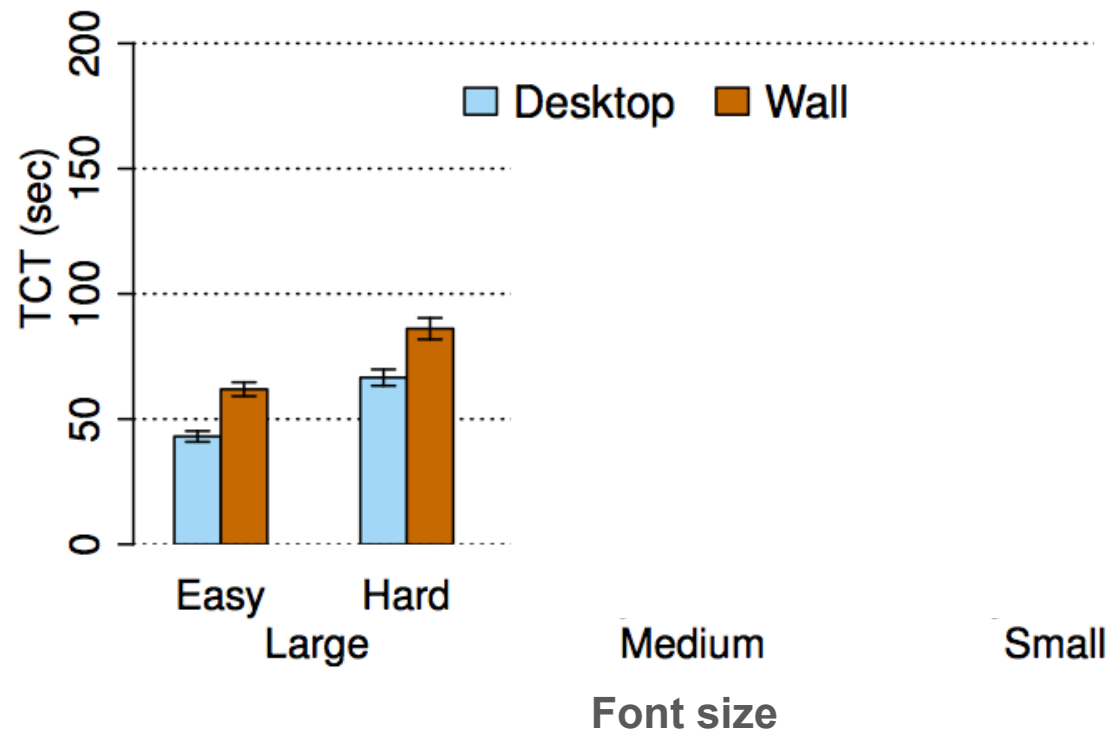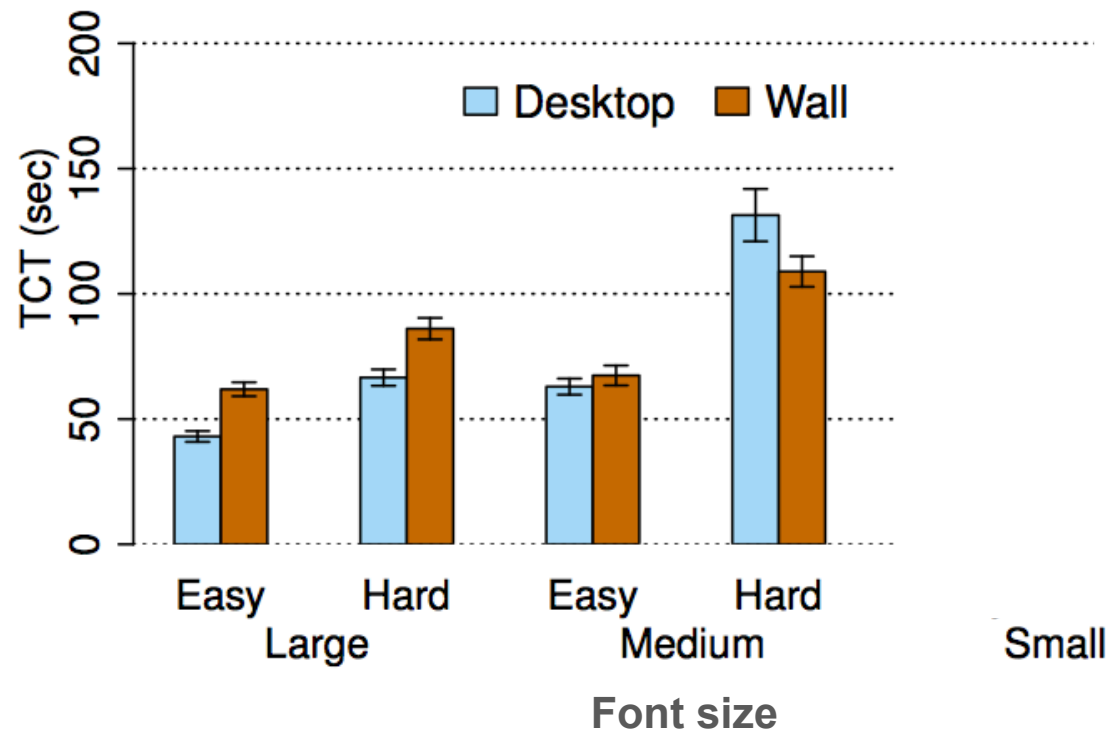(how to build it up)

TCT = Task completion time, Font size (Small is hardest)

Describe each graph

Wall display is significantly faster than desktop for difficult tasks (how to build it up)

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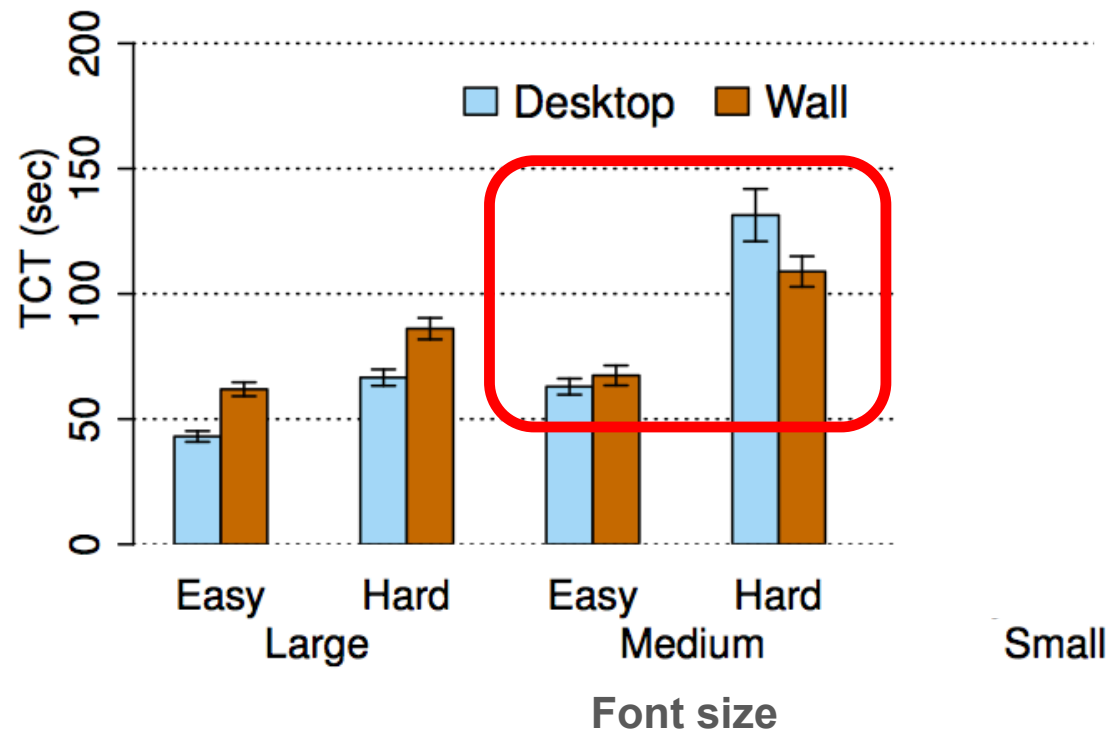Wall display is significantly faster than desktop for difficult tasks (how to build it up)

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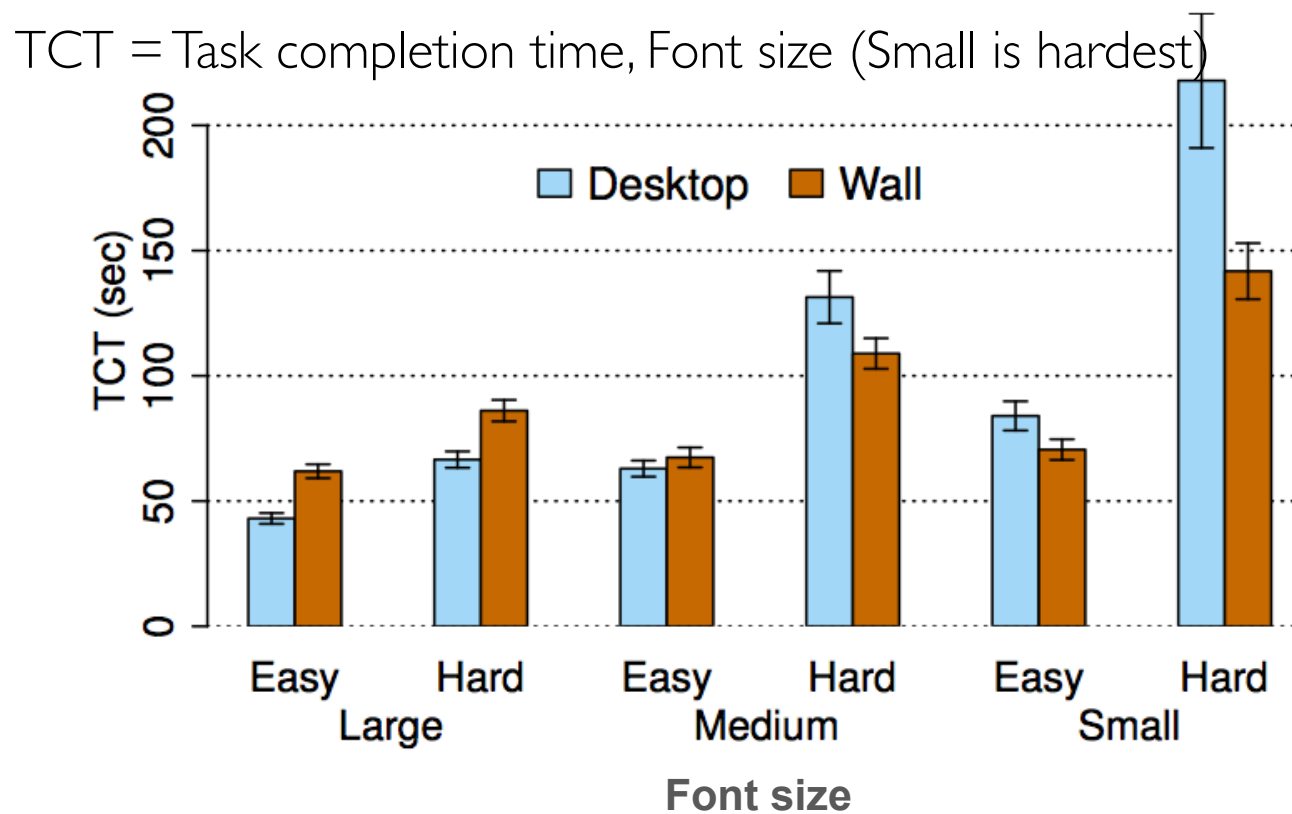TCT = Task completion time, Font size (Small is hardest)
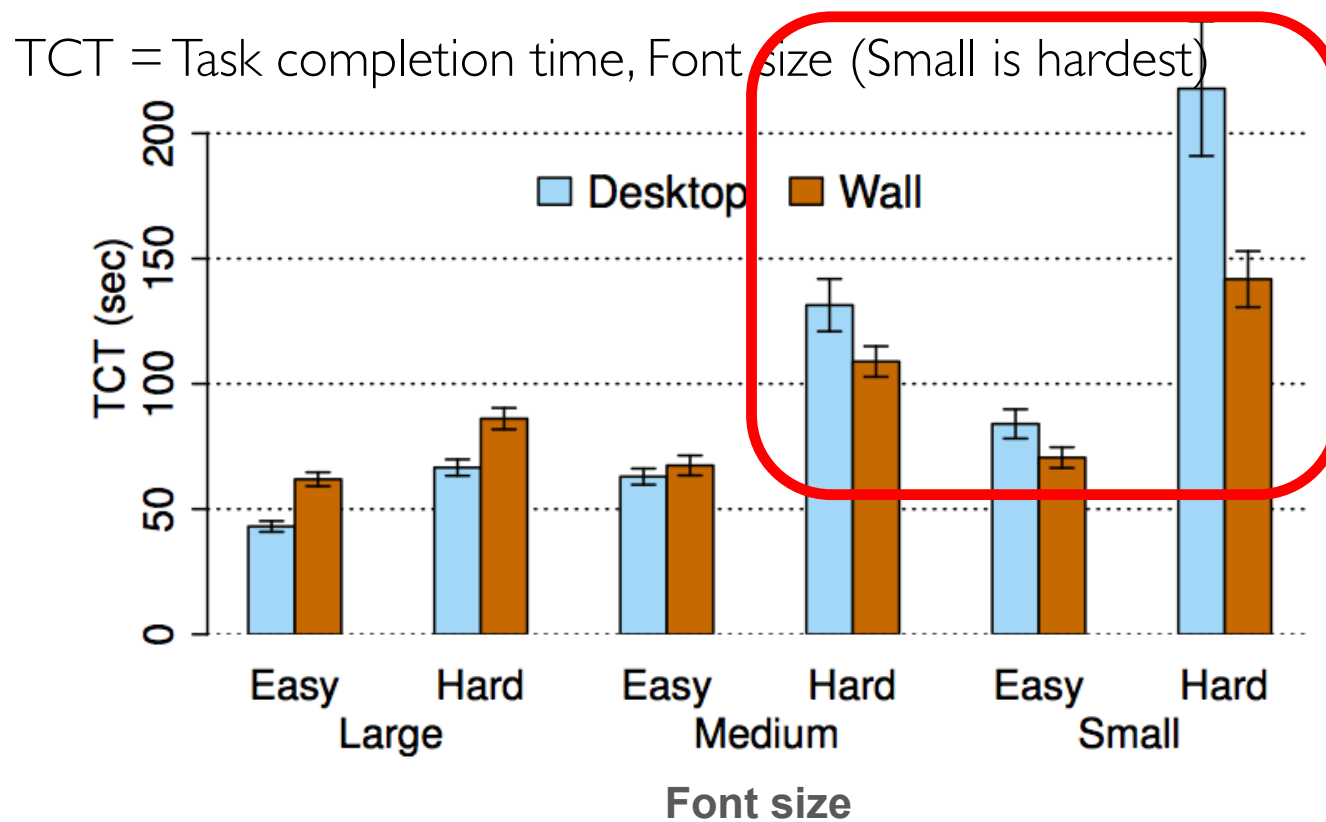
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Content suggestions

Better
  Focus on key arguments
  Avoid or explain jargon
  Use graphics, images
  Summarize key points

Worse
  Get lost in the details
  Assume audience knows jargon
  Text only
  Omit the conclusion

Presentation tips

Practice!

First, by yourself
   create the slides, work out the key message

Next, in front of colleagues
    get feedback: what was clear, what needs work?

Finally, by yourself
   go through the key points in your head before you sleep

Mental preparation

Practice your talk with colleagues
   practice answering questions!

If your talk is too long
   move some content as extra slides after your final slide

Avoid practicing late at night

   eat well, but not too much
   go to bed early

Review key points in your head
   what is the take-away message?
   can you summarize your talk?

Presentation tips

Know the talk well enough
    to present it in your own words

Don't read your talk!
Don't memorize and recite!

It is better to prepare <u>phrases</u>, then practice them

Use simple language:
    it is easier to remember

Remember:
    slide text should trigger/remind you what you say

Use 'presentation mode' or paper notes
    as backup

Voice

Pitch   Low is better than high

Inflection   Don't end with an upward tone

Pace   Slow down, include pauses

Articulation   Don't blur words, avoid 'um'

Speaking in English

English lets you vary the vowel sounds   Mary, marry, merry
     unlike Spanish or Greek :p

English does insist on emphasizing the right syllable
     an<u>a</u>lysis vs. <u>an</u>alysis

     .

Get help from a native speaker, if possible

But generally,
     find <u>simple</u> phrases you can remember
     rather than complex ones you will forget

Be concrete

Give examples
    make analogies

Tell a story
    illustrate each point

Visualize concepts
    use your hands

End with a strong conclusion
    do not fade a way

Delivery suggestions

Better	Worse
Talk	Read
Stand	Sit
Move	Stand still
Vary your pitch	Speak in a monotone
Speak loudly and clearly	Mumble
Face the audience	Look downward
React to audience	Ignore audience
Finish on time	Go over
Practice	"Wing it"

Observe good speakers. What do they do?

Preparation

Visit the room!

Figure out where to stand
to avoid blocking the screen

Sit in the audience
what do they see?

What to bring?

Usually:
  your laptop
  your talk on a usb key and online
  (not so much anymore, paper copy of slides)
  power cable
  dongles (Macs)
  business cards and/or QR code of website on slides

Technology Preparation

Will you need a microphone?
  lapel? podium? hand-held?
  do you know how to use it?

Will you use their laptop or theirs?

Yours: do you have the appropriate cables & adaptors?
  do the slides project correctly (bottom/edges)?
  does sound and video work correctly?

Theirs: do they have the correct version (slides/videos)?
  do you know how to control the slides?

Preparation: Breakdowns

What if the projector breaks?
  second projector available?
  whiteboard? (do you have a whiteboard pen?)
  smartboard? (do you know how to use it?)
  online slides? (do you have a link to share with audience?)

If you are planning to do a live demo, bring a backup video:
  demos break
  networks are slow or go down

Preparation

Day of the talk:
    dress comfortably
    arrive early

Meet the moderator
    explain how to pronounce your name
     ask for warnings:
        5 minute, 1 minute, stop!

Ask a colleague to sit near the front
    and smile at you!

        How do you prepare these for virtual tasks?

Presentation strategy

Repeat key points
  Tell them what you're going to tell them
  Tell them
  Tell them what you told them

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Tell a story   (but not the history)
  Progress through the points
  Help the audience keep track of what you are saying
        (verbally or visually with highlights on slides)

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    Tell them
    Tell them what you told them

Tell a story   (but not the history)
    Progress through the points
    Help the audience keep track of what you are saying
        (verbally or visually with highlights on slides)

Emphasize the take-away message
    They will forget most of what you say
    Help them remember your key points!

Presentation tips

Look at the audience
    treat them as your advocates, not your enemy
    assume they want to hear what you have to say
      (they do!)

Be enthusiastic
    if you are bored, you will bore the audience

Move, but do not pace

Presentation tips

Avoid laser pointers
  <mark>highlight</mark> text instead

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Consider building slides
   Focus on the current topic

Presentation tips

Avoid laser pointers
   highlight text instead

Consider building slides
   Focus on the current topic

Stay within the time limit
   practice with 1-minute and 5-minute reminders
   decide what you can cut if you short
   if you run out of time — stop!

How do you end your talk?

Raise your head and look at the audience
   to indicate you are done

Smile!

Say "Thank you"

Questions

When you practice with your advisor or other students
- ask them to think of possible questions
- prepare extra slides
   "I'm glad you asked that question!"

Repeat the question
- simplifies the question
- makes sure the audience can hear
- lets you focus on the part you want to answer
- gives you time to think

Questions

What if you do not know the answer?
>   Pause to give yourself time to reflect
>   Options:
>   "I don't know" or
>   (in a conference) "I will get back to you"
>   (in a conference) "We can discuss it at the break"

What if you get a hostile question?
>   Do not get angry, stay positive
>   (The audience will be sympathetic to you)

Handling stress

What if you are nervous?

Better to be a bit nervous
  than look bored

If you are *very* nervous — Breathe!
  Pause
  Take three deep breaths
  (the audience will wait)

Smile!
  (Yes, it actually helps)

New research findings …

If you are anxious,
    instead of trying to "calm down"

Tell yourself you are excited,
    not anxious

Envision at least three positive outcomes of your talk
    "My thesis advisor will be proud of me!"
    "I will get an offer for an interesting job!"
    "I will get interesting questions that give me new ideas!"
       or as a last resort *"I will be done soon!"* :)

Before you start

Find a friendly face in the audience
    - ask a friend to sit where you can see him or her
    - or make a new friend before the talk
Ask that person to SMILE at you!

If you have a hard time making eye contact
    look at the person's forehead

Prepare points where you can pick up the text
    if you lose track (key points in slides!)

Consider your personal timing

Calculate your talk duration
usually one minute per slide … but this can vary

When you are stressed,
do you speed up or slow down?

If you speed up,
make sure you have extra things at the end of the talk

If you slow down,
make sure you have points you can slide over
without losing track of the whole talk

Homework Assignment #6 Presentation Slides

Assignment #6   Presentation

Work in teams of <u>two</u>. Read a new research article.

Volunteer https://docs.google.com/spreadsheets/d/1jMO7slMPXB0xKgT3RPzwD9dtReG8it0M_1va78HLQ0k/edit#gid=0

Upload your presentation https://drive.google.com/drive/folders/1pua87Z9Lnm4eK_Cwa8PvDF9Jtg3G6X1X

Prepare 7-10 slides that summarize the article:

Slide 1:	Full paper + One-sentence contribution summary
Slide 2:	Introduce and justify the problem
Slide 3:	Explain most relevant related work
Slides 4-8:	Describe/illustrate what the authors did (including results)
Slide 9:	One-sentence summary &
	Present a brief critique
Slide 10:	Conclude with directions for future research

Give a **15-minute** shared presentation, followed by questions