TRƯỜNG ĐẠI HỌC BÁCH KHOA HÀ NỘI
HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Introduction to Presentation skills

Technical Writing and Presentation

SoICT - 2020

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The aims of the lesson

- Training skill of talking to an audience
- Contents involved in public speaking
- Understanding what influences the audience?
- Ability to speak clearly, concisely and convincingly
- Developing both personal confidence and skills to take into your future career

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The importance of presentation skill

- We all need to do this in on an everyday basis
- It is an integral part from most subjects at school, work, and life
- Efficiency in performing a task
- Increase motivation
- Using simple explanation and allocating a small amount of time

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Presentation skill in the 21st century

- People are exposed to vast volumes of information
- You need to maximize your message in a minimized amount of time.
  - Example – On a televised interview, the interviewee has an uninterrupted amount of time of between 2 -3 minutes.
  - Can you get your point across in such a short amount of time?
- Remember, the audience has a choice, they don't have to sit and listen to you !

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Choice of words in presentation

- Depends upon
  - the meaning we want to convey,
  - the person receiving the message and
  - the situation in which the communication takes place
- Examples
  - Words for a pleasant feeling of general goodwill: *cheerfulness, jollity, merriment, pleasure, joy, happiness*.
  - Use appropriate words
    - *merriment vs joy*
- Are conditioned both by **the person** who is going to hear them and **the situation** in which we find ourselves.
  - Talking to a friend: can be informal, even careless about our words
  - Speaking to a prospective employer: must be formal and careful.

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Speaking is an art

- Think carefully about:
  - Do the audiences really want to listen?
  - Do they know how to interpret our tone of voice and our body language?
  - Are they preoccupied with their own thoughts?
  - Is their knowledge of the language we're speaking good enough for our purposes?

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10 tips for Presentation

1. Practice, practice, practice
2. Speak, don't read
3. Be yourself
4. Aim for a positive state of mind and a confident attitude
5. Use verbal signposting
6. Use examples, illustrations and humor
7. Ask questions and invite participation
8. Be aware of eye contact and body language
9. Learn from the Pros
10. Be aware of technique

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Contents

I. Introduction to Presentation skills

II. Non-verbal Communication

III. Voice, Silence, Body language

IV. Model digital introduction

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I. Introduction to Presentation skills

1. Structuring your story
2. Preparing your data/information
3. Preparing and giving the presentation
4. Concluding your presentation
5. Questions and answers

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## How to Give an Effective Presentation: Structure

- Basic rule
  - Say what you are going to say
    - 1-3 main points in the introduction
  - Say it
    - Give the talk
  - Then say what you said
    - Summarize main points in the conclusion
  - Don't try to build suspense and then unveil a surprise ending

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Tell a Story

- Prepare your material so that it tells a story logically
  - Subject: title, authors, acknowledgements
  - Introduction/overview
  - Method/approach
  - Results/information/analysis
  - Conclusion/summary
- Use examples, anecdotes, and significant details
- Create continuity so that your slides flow smoothly
  - Guide the audience through your story
  - Your last point on one slide can anticipate the next slide
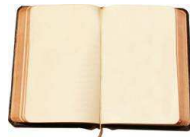
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Audience

- Why and to whom are you giving this presentation?
- What do you want the audience to learn?
  - Think about this as you construct your talk
  - Edit your slides -- delete what is unnecessary, distracting, confusing, off point

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Presenting Your Methods, Data, and Results

- Methods, Instrumentation
  - For most talks, only present the minimum
- Data Tables
  - Tables are useful for a small amount of data
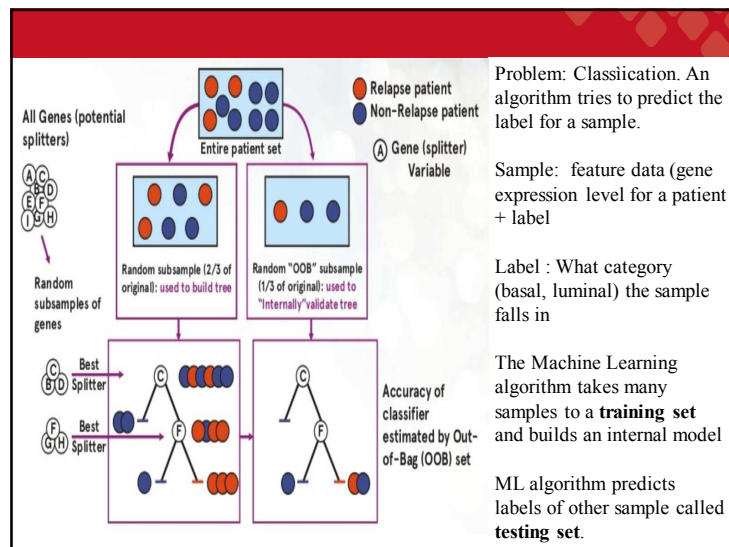 - Include units
  - Indicate data source if they are not your own

Continuous features	Mean	S.D.
Age diagnosed	68.3	14
Positive nodes	1.57	4.26
Number of tumors	1.4	0.717
Tumor size	43.1	37.3

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Preparing Your Data (continue)

- Figures
  - '1 figure ≈ 1000 words'
  - Figures should be readable, understandable, uncluttered
  - Keep figures simple, use color logically for clarification
    - Blue = cold, red = warm, dark = little, bright = a lot
    - Invisible color
    - Meaning attached to colors (color blindness is more common than you think
  - Explain axes and variables
  - Include reference on figure

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Problem: Classiication. An algorithm tries to predict the label for a sample.

Sample: feature data (gene expression level for a patient + label

Label : What category (basal, luminal) the sample falls in

The Machine Learning algorithm takes many samples to a **training set** and builds an internal model

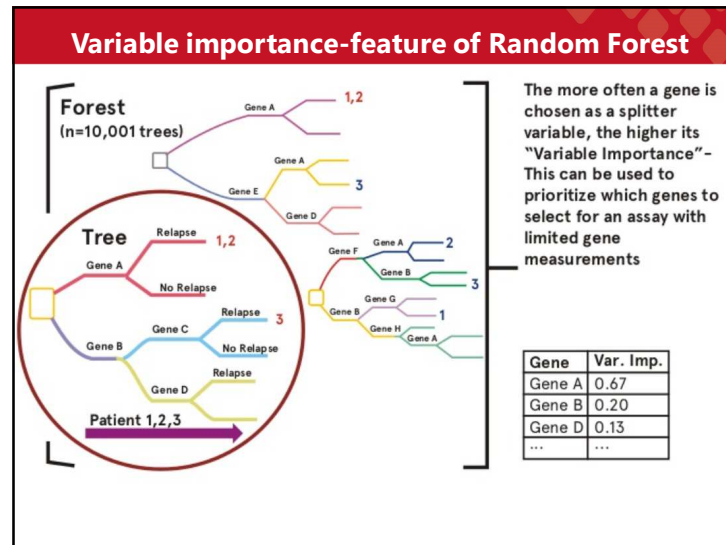ML algorithm predicts labels of other sample called **testing set**.

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Figures continued ...

- Create a summary cartoon with major findings, or an illustration of the processes or problem
  - Consider showing it at the beginning and the end
- You can use web sources for figures
  - Include reference

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Variable importance-feature of Random Forest

The more often a gene is chosen as a splitter variable, the higher its "Variable Importance"– This can be used to prioritize which genes to select for an assay with limited gene measurements

Gene	Var. Imp.
Gene A	0.67
Gene B	0.20
Gene D	0.13
…	…

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Preparing the Presentation

- Average not more than 1 slide per minute
- MS Powerpoint is now standard
  - If you use something else, be careful to check it in advance
- No sounds! Some logical animations good
- Use 3-7 bullets per page
  - Avoid writing out, and especially reading, long and complete sentences on slides because it is really boring to the audience
- Slide appearance (font, colors) should be consistent
- Spell check

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What Font to Use

Type size should be 18 points or larger:

18 point

20 point

24 point

28 point

36 point

AVOID USING ALL CAPITAL LETTERS
BECAUSE IT'S MUCH HARDER TO READ

* References can be in 12-14 point font

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Color

Dark letters against a light background work

Dark letters against a light background
are best for **smaller rooms**, especially when the
lights are on for teaching

http://www.fw.msu.edu/orgs/gso/documents/GSOWorkshopDocs5
p2006/PresentationTipsinPowerPoint.ppt#303,5,Powerpoint
basics: 1. What font to use

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Color

Light letters against a dark background
also work

Many experts feel that a dark blue or black
background works best for talks in a large
room

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Preparing Yourself...

- Immerse yourself in what you are going to say
  - Web of Science/Google it: use the latest news
- Make sure you are familiar with the projection equipment, remote control and Powerpoint
  - Bring your presentation on a memory stick AND a laptop with power supply AND an extension cord …
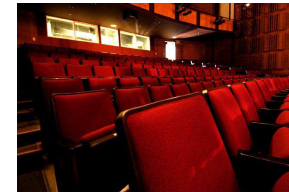
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What to Wear …

- Dress up – maybe wear a jacket?
  - More formal attire makes you appear more authoritative and you show you care enough to try to look nice
- From "Ask Dr. Marty" AnimalLabNews (Jan-Feb 2007)
  - Dark clothes are more powerful than light clothes
  - Shirts or blouses with collars are better than collarless ones
  - Clothes with pressed creases (!) are signs of power
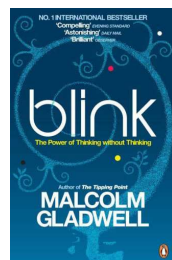
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Print Your Slides

- Don't read the presentation
- Print out copies of your slides ('handouts')
  - You can annotate them and use them as notes
  - You can review them as you're waiting
  - If everything crashes – the bulb blows, you can still make your main points in a logical way

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Rehearsing

- **Practice – actually stand up and say the words out loud**
  - You discover what you don't understand
  - You develop a natural flow
  - You come up with better phrasings and ways to describe things
    - It is harder to explain things than you think, practicing helps you find the words
  - Stay within the time limit
  - Try speaking too loud to get a feeling where the upper limit is
- **Don't over rehearse or memorize the talk**
  - The first practice things will improve at least 10 fold -- the second will make things twice as good -- the third may add a bit of polish, but from there it can easily get worse

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Giving the Presentation

- Starting out is the hardest part of the talk
  - To get going, memorize the first few lines
  - *"Hello, I'm Huong Nguyen. The title of my presentation is, 'Machine Learning for cancer'. I want to combine computer science and biology.Machine learning techniques have been exploited as an aim to model or to simulate the progression and treatment of cancerous condition."*

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Giving the Presentation

Experienced speakers:
  - Speak freely and look directly at audience
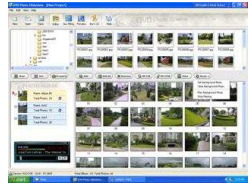
Inexperienced speakers:
  - Put outline and key points of your presentation on your slides
    - You don't have to remember what to say
    - Eyes are on the slide not on you
    - Key points are there for people who weren't listening or who are visual learners

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Giving the Presentation

- Stand where the figures can be seen
- Look at people during presentation
- Be enthusiastic
- Don't worry about stopping to think
- Don't rush
  - Figure out which slide is your half-way mark and use that to check your time


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Giving the Presentation

- Don't apologize or make comments about yourself
  - "I hope you're not bored"
  - "I was working on this 'til 3 am"
- Don't overuse the pointer
- Don't try to be cute and don't force being funny
- Don't forget acknowledgements, always give proper credit
  - Tip: Everyone in the audience has come to listen to your lecture with the secret hope of hearing their work mentioned

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Concluding Your Content

- Announce the ending so that people are prepared
  - For example, with a slide titled "Conclusions"
  - Or by saying, "In my final slide …" or "My final point is …"
- Have only a few concluding statements
- Come back to the big picture and summarize the significance of your work in that context
  - Extend logically beyond your limited study – but don't overreach
- Open up new perspective
  - Describe future work, raise questions, potential implications
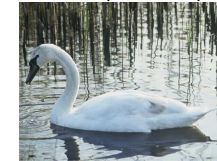
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Finishing Your Presentation

- Think carefully about your final words and how to finish your presentation strongly
  - Don't just drift off … "I guess that's all I have to say …"
  - You may want to actually memorize your ending lines, just as you do your starting points
- Ending your talk
  - Say "Thank You" … pause for applause … then
  - Say: "Any questions?"

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What Can Go Wrong?

- Uncertainty about material
- Interruptions
- Running out of slides
- Running out of time

Now what's on the Worry Agenda today?

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Uncertainty About the Material

- Try to structure your talk so that you are sure about the material you present
- If you have to address something important that you are unsure of
  - Acknowledge the gap in your understanding
    - "I'm working on it" or "I'm looking into it"
  - This is better than being pressed to admit something
  - Also it may very well be an open question
- Another way to handle this is to raise it as a question yourself
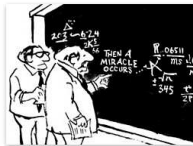
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Minor Interruptions during Your Presentation

- Don't look irritated or rushed
- Answer – briefly – just enough to straighten it out
  - Then carry on with your presentation without checking back
- A question that you will answer later in your talk?
  - Say "Good point; just wait two slides"
- Requires a long answer and is not critical understanding?
  - Say "Good point; I'll come back to it at the end of the talk."

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## Major Interruptions During Your Presentation

- If most in the audience are non-specialists
  - Explain the issue to the audience
  - Delay discussion until after the talk
- If most of the audience is knowledgeable
  - Make your point as clearly as you can
  - Discuss it out – don't try to diminish or avoid it

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Running Out of Slides

- Short talks are better than ones that are too long
- What to do:
  - Don't make a personal comment
    - "hum, I'm running out of slides …"
  - Stretch it a little -- see if you can think of an example, or story, to bolster your points
  - Conclude unhurriedly, summarizing your main points, but don't be repetitious
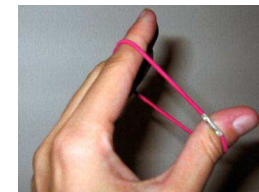
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Running Out of Time

- Avoid this – impolite to other speakers and the audience: if it happens …
  - Do not assume that you can carry on past your time
  - Do not skip all of your slides looking for the right one to put on next
  - Conclude – on time wherever you are in your talk -- by making your main points
    - In Powerpoint you can just type the number of your concluding slide and press Enter to skip right to it

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Questions and Answers

- Questions after your talk can be difficult but they definitely help you in writing up your research
  - Identifies parts the audience did not understand
  - Focuses and adds dimension to your analysis
- You can repeat the question
  - This gives you time to think
  - The rest of the audience may not have heard the question
  - Also if you heard the question incorrectly, it presents an opportunity for clarification

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Questions and Answers (continued)

- Keep your answers short and to the point – don't respond with another lecture
- Don't say that a question is bad, or that you addressed it already
  - Rephrase it into something that you want to talk about
- Never demean the question or questioner
  - They may have friends in the audience, and you never need more enemies
  - The research world is smaller than you think and you will continue to encounter people throughout your career

"It's a clear case of RLS: Repetitive Lecture Syndrome."
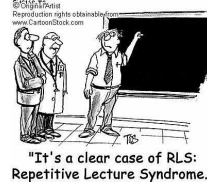
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Difficult Questions

- Usually you have thought more about the material than anyone else -- this puts you in a stronger position than you may think
- Anticipate typical questions and prepare for them
  - Generalizability of your findings to other times? Other places? Other conditions?
  - Methodological bias? Uncertainties? Exceptions? Priorities?
- Still concerned about questions?
  - Make extra slides – perhaps on details of instrumentation or methodology

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Difficult Questions (continued)

- If you really don't know the answer
  - Say "Interesting, I will look into that" or "That's a good point, let's discuss it afterwards"
  - Don't feel that you have to invent an answer on the fly -- you are only human and you can't have thought of everything
- If the questioner disagrees with you and it looks like there will be an argument then defuse the situation
  - "We clearly don't agree on this point, let's go on to other questions and you and I can talk about this later"

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Deal with difficulties

- Taking the high road and thinking long term
  - If your host or the session chair handles something badly, don't refer to it in public
  - If other panelists take too long – don't complain, just make your main points within the remaining time
  - If something happens to make you angry, think of a way to turn it around rather than having a public confrontation,

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Conclusions

- Structure your content in a way that is comfortable for you
- Use your own style to your advantage
- Think ahead about where you might encounter difficulties and figure out ways to overcome them

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