

## How to ride the research roller coaster:

Effective presentation skills.

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- General Presentation Tips
- Practical Presentation Tips
- Microsoft Powerpoint Demo
- Poster Presentation
- Elevator Pitches

# Seminar on Effective Presentation Skills



The advice in this seminar comes from personal experiences and online references!

# Presentation Skills are Essential

#### **Presentation occasions:**

- Thesis defense.
- Conferences and workshops.
- Seminars, invited talks, white board sessions.
- Poster sessions and competitions.
- Networking events.
- At the elevator or lunch table.
- Job interviews.



You spent so much time and effort in a project... Now spend time preparing how to best present it!

# **Know Your Audience**

Expert — > Getting harder to explain. — > 
Expert — > Knowledgeable — > CS Researchers — > Students — > Your friends — > Your Grandma

## Things to adapt:

- Terminology.
- Assumptions.
- Background information.
- Motivation and importance of the problem.



# Time is of Essence

## How many slides to make? Follow the 2/3 breakdown.

- If you have 30 mins, make 20 slides.
- Each slide takes 1-2 minutes.
- Mark which slides could be skipped.
- Make backup slides.
- Make time for pauses and switching slides.
- Don't panic, if running out of time.
- Skip slides, do not talk faster.

Better to say less, than say things fast.



# Structure of a Talk

### How to structure the talk? Follow the 10-15-5 breakdown.

- Introduction: 10 mins.
  - The problem space.
  - Why is it important.
  - What others have done.
  - What you are proposing.

#### Most important part of the talk.

Keep it easy to follow and engaging!

The attention span of an audience lasts about 7 minutes!



- Technical Contributions: 15 mins.
  - Solution, insights, evaluation.

## Technical part.

Audience may lose attention.

- Conclusion: 5 mins.
  - Remaining challenges.
  - Important takeaways.

## Wake them up!

Tell them what to remember from this talk.



# Practice, Practice, Practice



#### The rule of thumb:

the more you practice, the better you become.

#### The rule of the other thumb:

the more talks you attend, the more you will shape you presentation style.

- Practice with your advisor, peers, at group meetings.
- Record yourself and play it back.
- Get feedback on the content and flow of the slide deck.
- It gets better and easier with time.

# Talking Tips

Do not read notes or text on the slides.



- Keep **keywords** on the slides or the notes.
- Practice, but do not memorize.
- Memorize the first few minutes to get into the flow.
- Keep a steady voice and pace.



- Pause when switching slides.
- Work on your "eeer".. "so".. "mmm"..
- Talk with enthusiasm!



## Where to look at?



- Face the audience.
- Don't look at your slides.
- Move your eyes across the audience.
- If too nervous, look at the void.

# How to Answer Questions

- Be confident. Noone knows the work better than you.
- Think about potential questions and prepare backup slides.
- Have a colleague ask you a question to start the Q/A with confidence.
- Repeat the question in the way you understand it.
- If you are not sure how to answer, or don't know what to say:
  - Let's take the discussion offline.
  - We didn't consider this angle, but thank you for pointing it out.
  - We didn't consider this angle, because the focus of this work was to..
- Never apologize!



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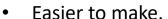
# **Practical Presentation Tips**

# Presentation Styles (1)

Every person has their own style preferences both as a presenter and as a member of the audience.



### **Pros:**



Includes detailed information.



### Cons:

- Harder for the audience to follow.
- Harder to spark interest.

#### How to make it work:

**Example 1: only text.** 

- Use bullets, different fonts, sizes and color to keywords and headings.
  - ...but don't overdo it! Be consistent!
- Use animations.
  - Show blocks of text as you speak.
- Balance it with use of images.
  - Graphics are easier to understand.

# Presentation Styles (2)

Every person has their own style preferences both as a presenter and as a member of the audience.



#### **Pros:**

**Example 2: only graphics.** 



Sparks interest.



#### Cons

- Hard to visualize everything.
- Important information may be missing.

### How to make it work:

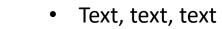
- Balance the use of graphics and text.
- Text contains only important information, summaries etc.
- If graphic does not show important information, make it smaller.



# Tips on the Structure of a Slide



It is helpful for the audience to follow structured content.



- Text, text, text
- Text, text, text

• Text, text, text



**Graphic Caption** 

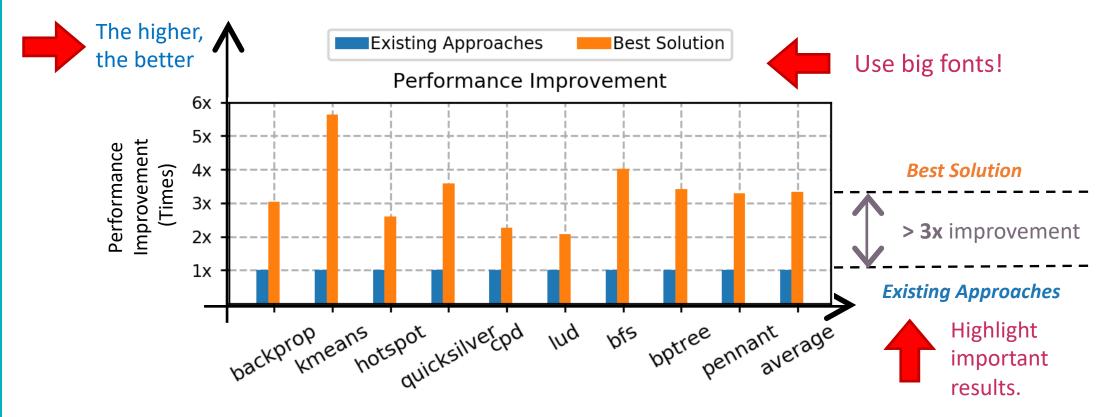


**Takeaway:** Summarize 1 thing the audience needs to take away from this slide.



# Presenting Graphs of Experiments

Spend time to explain the axis, the metrics and the expected behavior.



You can show the axis first and explain what will come.

# The Last Slide



The slide that remains open during the Q/A should summarize important parts of the talk.

Contributions

Takeaways



Scan my website



<email>

.. Any acknowledgements ..

.. Add other logos, graphics..

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# PPT Demo

# Microsoft Powerpoint Demo

- Insert icons, images.
- Animations.
- Slide master.
- Add slide number.
- Group, save as an image.
- Record a video, timings, rehearse.
- Export to .pdf, .mp4, .gif

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# Posters

# How to Structure a Poster



### My I[M] DEA:

Show your Work Day

The Poster Competition Committee



Title of the Project
Author(s) and Affiliation(s)

#### WHAT?

**IMDEA Poster Competition** 

Come to **present your work**, **socialize**, and **celebrate** the beginning of the summer!

There is no free lunch in privacy, but we will have it.

#### CHALLENGE:

Can you create an X poster understood by Y people? X, Y := crypto, PL, security, ...

#### WHEN?

Prep Workshop: **26 May**Poster Registration: **1 June**Poster Submission: **16 June**Event: **30 June** 

WHO?

All IMDEA humans without

a PhD degree can participate

#### WHY?

Show your Work! Learn other's Work!

Win IOUs [1]:



300 IOU



200 IOU



100 IOU

And surprises for everyone!

## For example:

Problem Space.

**Blocks of Content** 

- Motivation.
- Solution.
- Evaluation.
- Future Work.

# Tips -

- Less text (10x less, really).
- Big graphs and fonts.
- Highlight important parts.
- Main idea should be clear.
- No one will read a full poster.

#### HOW?

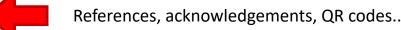
- 1. Register for the Prep Workshop.
- 2. Register your Poster.
- 3. Make an AO size poster (similar, but don't copy this).
- 4. **Submit** your poster.
- 5. Present i
- 6. Have fun, free lunch and win fun prizes!

#### MORE INFO

Read our call for posters to learn how to **trick our jury** and win the most IOUs.

Join My I[M]DEA @Mattermost.







[1] IOU (IMDEA Owes You) is an imaginary currency -worth for the same amount in Euros- that you can use to buy non-

# How to Present a Poster

## **Lightning talk:**

- 1 minute version.
- Why visit my poster?

#### In front of the Poster:

- 5 minute version.
- Point to the poster.
- Point to keywords.
- Point to graphs.

### Flow of Poster Presentation

- 1. What problem are you trying to address?
- 2. Why is it an important problem?
- 3. What do you do about it (main contribution, insight).
- 4. What do you achieve (results).

Read this resource: "Creating an Effective Poster" by John Wilkes. <a href="http://goo.gl/HUVffd">http://goo.gl/HUVffd</a>

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# **Elevator Pitches**

# **Practicing Elevator Pitches**

The answer to "So, what are you working on?"

## **Example Flow of the Pitch**

- Introduce yourself.
- What is your research area?
- What problem you are working on?
- What is the main idea of your solution?
- How is your solution useful?
- 60 seconds.
- Is the other person an expert?
- Show excitement!
- Use a timer.

## **Group Activity**

## What is your research area?

- Cryptography.
- Programming Languages.
- Formal Methods.
- Security.
- Software Engineering.
- Machine Learning.

## Split in 6 mixed groups.

- Pitch 1 at a time.
- Pay attention to the speaker!

#### Rotate.

Repeat pitch 1 at a time.

## Come back all together.

- Go around the room 1 at a time.
- What do you remember about their pitch?