

1 Great Slides

1.1 Texts

As a general rule, you should avoid putting whole sentences onto a slide. The more text you use, the more time everybody spends reading them (and not listening to you) and in the worst case, this can make your audience completely stop following you. Usually, you can always reduce the length of a statement without losing content. For example (taken from Wikipedia GANs) "Given a training set, this technique learns to generate new data with the same statistics as the training set" you could reduce to "learns to reproduce the data" without losing (basically any) content.

1.2 Bulletpoints

Bulletpoints can be some of your most powerful tools to create understandable slides. Taking again a sentence from wikipedia GAN: "The generative network generates candidates while the discriminative network evaluates them", you can simplify this into:

- 2 Parts:
 - generative network: generates new data
 - discriminative network: evaluates them

Making your content much easier to digest. Also, don't be afraid to use bullet points in bullet points. This can allow you to give more information on a slide than needed to follow your presentations, while not discouraging your audience.

1.3 Wikipedia

When I was in school, my teachers always told me to never use Wikipedia (since everybody could just change it). And while there are regions in which this might be true, for informatics Wikipedia can be a great source. Just maybe don't just copy text from there. First of all, these are only full sentences (see previous chapter(s)). Maybe even more importantly People notice and it is hard to care to read something when even the creator did not do this. Also, at least remove links.

1.4 Animations

Animations are a complicated question. Some people like them, as they can spice up a boring presentation, but you could also find them quite distracting. I think we saw animations done right yesterday. Consider this animation explaining convolutions (<https://giphy.com/gifs/blogdaniel-keypoints-i4NjAwytgIRDW>). It was used to explain a quite complicated mathematical concept while not being too flashy. Just consider using the formula instead:

$$g(x, y) = \omega * f(x, y) = \sum_{dx=-a}^a \sum_{dy=-b}^b \omega(dx, dy) f(x + dx, y + dy),$$

Figure 1.1: Taken from wikipedia: Kernel Image Processing

I would never use animations that don't contribute to your talk (for example for switching between slides)

1.5 Images

Often you can say the same with a couple of bullet points as you can do with an image. I would say: The more the audience knows about your topic and the better you are as a lecturer, the more images you should use. There is no reason to explain a trivial topic (let's say matrix multiplication) with a bullet point, while you can include it in an image while giving much more information about the context. This can make your presentations super engaging, but also creates the risk that somebody who cannot follow your explanations cannot follow the presentation at all. On the other hand, if you are confident with your Presentation skills, some of the best presentations I have ever seen were basically only images. I would use 1 image on each slide (at least when this makes any sense) You should also write below an image of how to find it. This might not make your presentation much better but makes our job criticizing your presentation much harder.

1.6 Pagenumbers

One often forgets them and they seem insignificant, but page numbers are absolutely essential. We want to talk about your Topic later on, and remembering which slides you wanted to talk about is much easier with page numbers. Also including the number of slides (Page 7/22) can help keep your audiences attention.

2 Great Talk

2.1 Dont read your Presentation

You should never read from your Slides. This is something we can do too and don't need you for. And this makes you look like you have no idea of the Topic you're talking about. It is ok to look at the Presentation to see where you are at, but you should know what to talk about at a given time. This is also something that gets much easier when you use short bullet points instead of long sentences. I would also prefer to not talk about a subsentence when I forgot it, rather than having to stop and think about it. If you have problems with this, using some notes on your phone can help (and be less obvious)

2.2 Practice

This might be the most obvious subsection, but you need to practice your presentation before. This helps keep time limits (in another event we had a time limit of 3 minutes and your presentations were 4.7 +- 1.8 min long), reduces nervousity, and most importantly makes your presentation much more enjoyable. I usually practice my presentations until there I am no longer anxious but proud and look forward to presenting them. When the first time you actually talk about your presentation is in class, I can basically guarantee you, that you won't get a good grade. Also, it can be useful to present to somebody before. Your supervisors are a good choice for this.

2.3 Volume

You should speak loud (and slow enough). This often automatically happens if you practice enough, but a good way to test this in an actual presentation is to see if your audience seems to respond to your talking. In the graded presentation, we will also interrupt you if you are not understandable.

2.4 Density

Slides that are way too full are often impossible to follow and those that are nearly empty often lose their audience. As a rough guideline, I would use on average 1-1.5min of your presentation for each slide and put for each sentence you make something, but not everything, on the slides.

2.5 Audience

You absolutely need to keep your audience's attention. If you see somebody on their phone in the third row, this might be quite impolite but is also (at least somewhat) your fault. You can obviously lose your audience by being too complicated (Maybe try not to use too many technical terms) or by being boring (Don't be too predictable), but you can also lose them more subtle. I can for example help to make eye contact with your audience. Generally try to respond to them (this is a very hard skill to master)

2.6 Relation between Slides and Talk

In a good Presentation, your Slides and your Talk should extend each other, but still, relate to each other. While talking you can give much more background information than could ever fit onto a slide, while an Image can do much more than you talking. Also, your slides allow somebody slightly lost (thinking about some subtopic for example) to catch up, while your talk

can be much less formal. In the best Presentations, somebody listening to your/looking at your presentation will get much more out of this than somebody looking at your slides and later listening to your talk (without slides), while both function on their own too.

2.7 Have Fun

Finally, just remember to have fun. This seems like a platitude, but when you enjoy talking about something, people also enjoy listening much more. When I think about the Professors I had with the best lectures, these are those Professors with a deep fascination for there subject. And since these teachers probably ignore every subsection sometime (except maybe wikipedia and volume), this might be the most important note.