## Presentation and Oral Communication Skills

Shiri Azenkot, Cornell University Ramón Cáceres, Google



#### Ramón Cáceres



- Grew up in Dominican Republic
- BEng in EE from McGill U in Canada
- MS in CS from UC Berkeley in CA
- Software engineer in Silicon Valley startup: Pyramid
- PhD in CS from UC Berkeley in CA
- Industrial researcher at AT&T and IBM in NYC area
- Startups in NYC along the way: Vindigo, ShieldIP
- Software engineer at Google in NYC





### **Shiri Azenkot**

- Israel -> San Jose, CA -> Seattle, WA -> New York, NY
- BA in computer science, Pomona College
- Software engineer, 3 years
- MS + PhD in computer science, University of Washington
- Assistant Professor of Information Science, Cornell Tech, Cornell University



Why is it important to be a good communicator?

## Good communication helps you...

- Dissemination
- Getting a job
- Getting funding
- Finding collaborators

Opportunities!



**Preparing your presentation** 

#### Consider the context

- Who's your audience?
  - Colleagues in your research area
  - Colleagues in your field (e.g., computer science)
  - Students (high school, PhD students)
  - Others?



#### Consider the context

- What's the purpose of your presentation?
  - To inspire
  - To inform
  - To entertain
  - To impress



#### Consider the context

- What are your constraints?
  - Time
  - Materials (AV)
  - Size of room and audience



The beginning of the presentation

# Script the beginning of your presentation

- Begin with a promise
  - Provides an overview
  - Captures people's attention
  - Generates excitement and interest



## What's your promise?

- Think about a recent presentation you gave.
- What promise could you use next time you present that work?
- Make it concise, relatable, compelling.



#### Our promise

We're going to tell you about how to prepare and deliver excellent presentations that will help you throughout your career.



### **Another promise**

I'm excited to tell you about a system that we designed that helps people with low vision complete an important daily task.



**Contents of your presentation** 

## Key content in your presentation

- 1. What is the problem you're trying to solve?
- 2. Why should your audience care?
- 3. What have others done to try and solve this?
- 4. What did **YOU** do?
- 5. How do you know what you did is **good**?
- 6. What is your contribution?



## Planning what you'll say

- Talk to your audience, don't read to them
- Tell the story of your research
- Repeat key ideas
- Use verbal punctuation
- Pause



## Design effective supporting materials

- Use slides to support you
- Incorporate images, videos, and props to help explain your ideas
- Speak all text on the slides
- Verbally explain visuals and videos
- Add captions to videos
- Use large fonts
- Use clear and minimalist graphics (avoid complexity)



### Make your presentation accessible

- Speak all text on the slides
- Verbally explain visuals and videos
- Add captions to videos
- Use large fonts
- Use clear and minimalist graphics (avoid complexity)







#### Study

- 1. What challenges do low vision people face when performing daily activities?
- 2. What strategies do they use to address these challenges?



#### **Related Work**

- Focus on closely related work. Typically many fewer citations in a talk than in a paper.
- Compare and contrast the previous work to yours.
   Don't just summarize other work.
- Stress building upon vs. tearing down.



## Wrapping up your talk

- Summarize contributions to the state of the art
- Mention future directions and open issues
- Be strong and positive
- Choose your last slide wisely. It tends to be up for a long time during Q&A.



#### **Other advice**

## **Delivery and Confidence**

- Speak with confidence. You're the expert.
- Face your audience, not the projection screen
- Avoid verbal fillers (e.g., um, ah). Silence is OK.
- Be aware of your body language



### Practice, practice!

- Give the talk aloud to yourself
  - Calibrate your timing
  - Practice transitions, not just core content
- Give the talk to a practice audience
  - Gather honest feedback
  - Make changes to address the feedback
- Cultivate a community/culture of practice talks



## **Handling Questions**

- Answer with confidence. Again, you're the expert.
- But don't be afraid to say you don't know. Offer to follow up with the questioner.
- You may get persistent questioners. Take discussion offline if it goes on too long.
- Don't take aggressive questions personally. Try to answer the content of the question.
- Anticipate likely questions. Prepare backup slides.



#### **Elevator Pitches**

- There are frequent opportunities to answer the question "What are you working on?"
- Have ready a 1-minute pitch about your work
- Make it concise and meaningful
  - Quick motivation / context
  - Main results so far
- Follow up with more detail if there is interest



#### **Summary**

- Know your audience, purpose, and constraints
- Begin with a promise
- Tell the story of your research
- Visuals are key
- Practice



#### Useful resources

- How to Give a Bad Talk
   https://people.eecs.berkeley.edu/~pattrsn/talks/BadTalk.pdf
- Oral Presentation Advice
   http://pages.cs.wisc.edu/~markhill/conference-talk.html
- Out Loud <a href="http://randsinrepose.com/archives/out-loud/">http://randsinrepose.com/archives/out-loud/</a>
- Presentation Zen <a href="http://www.presentationzen.com/">http://www.presentationzen.com/</a>



#### Five-minute exercise

- 1 minute: Think about your own answer to "What are you working on?"
- 1 minute: Pick a partner sitting next to you.
- 1 minute: Partner 1 gives answer to Partner 2.
- 1 minute: Switch roles.



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