COSC7388 Advanced Distributed Computing

-- How to build reliable wireless healthcare systems?

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Outline

- Course overview
- Ten commandments on technical presentation
- How to write critiques?
- Paper sign-up

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Technical Goals

- Understand requirements and the state-of-the-art practices in wireless healthcare practices
- Reliability : communication, computing, and storage
  - Robust communication and wireless co-existence
  - Byzantine fault tolerance
  - Error detection and correction in storage

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Educational Goals

- Present technical ideas clearly in writing and orally
- Be critical during paper reading

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Grading

- Presentation (20%)
  - Paper 1 - 2 time/semester; 2 papers per class
  - Project presentations
  - Presenters should email me the slides on Monday!
- Paper critique (20%)
  - Turn in BEFORE classes – in subject title, include "cosc7388"
- Survey report (20%)
- Final project (40%)
  - Can be done in a group up to 3 students

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Prerequisite

- Knowledge in computer networks, wireless networks a must
- Familiarity with some programming languages

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How to Give Technical Presentations?

Complete coverage can be found at
http://www2.cs.uh.edu/~jaspal/cosc7397/06talktalk.pdf

The Parts of a Technical Talk

- Introduction
- Body
- Technicalities
- Conclusion
- Questions

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Introduction

- Define the problem
- Motivate the problem and hook audience
- Introduce needed terminology
- Discuss earlier work
- Explain the key contributions
- Provide a roadmap for the rest of the talk

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Body

- Describe the main hypothesis, experiments, analysis
- List the major results
- Explain the significance of the results

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Technicalities

- Present a key lemma or technical idea…
- Descend into detail briefly, slowly and carefully
- perhaps convince people that what you have done is not trivial …

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Conclusions

- Summarize the key points – regain lost audience
- Make observations that would have been confusing in the beginning
- Give weaknesses, open problems
- Indicate that the talk is over

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Questions

- Genuine request for information –> answer the best you can
- Questioner wants to look smart and knowledgeable --> be polite and complimentary
- Malicious questions
  - be polite and measured in response
  - Move questions "offline" if needed
  - Say "I don't know" (with assurance) if needed

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Addressing your Audience?

- General public
  Introduction **Body** Technicalities
- CS folks, e.g, a colloquium
  Introduction **Body** Technicalities
- CS folks in your area, e.g., seminar class
  Introduction **Body** **Technicalities**
- Experts, e.g, focused workshop
  Introduction **Body** **Technicalities**

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The Ten Commandments (1)

1. Repeat key concepts
2. Remind, don't assume
3. Give examples, not proofs
4. Use logical order
5. Size talk to the time

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The Ten Commandments (2)

6. Maintain eye contact
7. Maintain ear contact
8. Simple visuals
9. Employ pictures
10. Do not get anxious

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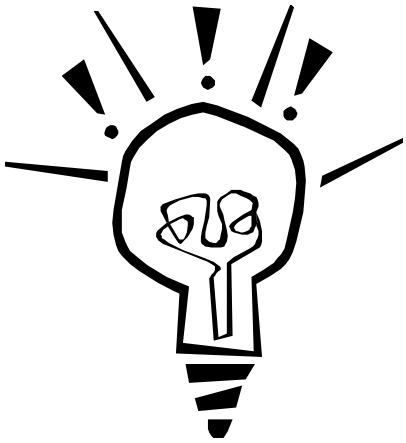
Simple Visuals

Too many *sspecial effectss*, *fonts*, **colors**, etc. make slides hard to read and understand and distract from ***your*** *talk*.



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Pictures Pictures!!

- One picture (graph, diagram) can save 5 minutes of explanation
- Good picture are worth the (considerable) time to make them
- …. but don't litter your overheads with pictures from the web
- Quality of pictures is important (ticks)

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Deadly Sins

- No backup plan
- Including material you don't really understand
- Trying to include too much
- Inconsistent fonts or Capitalization of words
- Going over your time
- Being boring
- Speaking unintelligibly
- Arrogance
- Losing your audience

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Conclusion

- Practice makes perfect
- Observing others
  - How slides are made
  - How flow of presentation is organized

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How to write paper critiques?

- Why?
  - To keep a journal of papers you've read in the past
  - To organize your thoughts logically after paper reading

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What is Paper Critique

- Short summary of the paper
  - What problems does it address and how?
- Evaluation of the significance of its technical contribution
  - What is new?
    - New problem, new methodology to an established problem,
    - marginal improvement to existing solutions
  - How well does it work?
    - Are assumptions made valid?
    - Is the evaluation comprehensive
    - How does it compare to competing solutions?
    - What new insights can be gained?
- Suggestions on aspects that can be improved
  - Support your arguments!

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What is Not

- Lengthy copy & paste of parts of the paper
  - No, abstract won't suffice

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***Familiarity*: Rate your familiarity with the topic of the paper.**	○ Expert ○ Familiar ○ Some knowledge ○ Novice
***Recommendation*: Your overall rating.**	○ Definite accept (top 10%, excellent paper) ○ Likely accept (top 20% but not top 10%, significant contribution) ○ Accept if room (top 30% but not top 20%, borderline for Networking) ○ Likely Reject (top 50% but not in top 30%, needs more work) ○ Definite Reject (bottom 50%, not up to Networking standard)
***Contributions*: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity, impact, and technical depth in the paper.**	
***Strengths*: What are the major reasons to accept the paper? [Be brief.]**	

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*Weaknesses: What are the most important reasons NOT to accept the paper? [Be brief.]	
*Detailed Comments: Please provide detailed comments that will be helpful to the TPC for assessing the paper. Also provide feedback to the authors.	

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