Sharing Your Research Results: How to Create a Winning Poster

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Sharing Your Research Results: Motivation

- Communicating project findings an important skill
- Industrial engineering/science positions
- Courses and research in grad school
- Summarizing experiences is integral part of research
- Experimental results
- Successful and unsuccessful approaches
- Lessons learned during project
- New research questions raised

Goals of presentation:
- Explore methods for communicating results
- Why posters?
- Describe how to design a good research poster

Approaches for Communicating Results

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<th>Easy to create</th>
<th>Widely applicable</th>
<th>Large audience</th>
<th>Interactive?</th>
<th>In-depth discussion?</th>
<th>Archival?</th>
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<tbody>
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<td>Poster</td>
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<td>Web page</td>
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<td>Demo</td>
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<td>Paper</td>
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Legend: ☑ = yes (good), ☐ = maybe (so-so), ☐ = no (bad)

- Posters
  - Easy (and fun) to create
  - Applicable to many disciplines
  - Great for sharing results with local community
  - Permit interactive discussion

Why Do People Create Posters?

- Interactive presentation of research to local community
- Undergraduate research fair
- Graduate course project results
- Summary of ongoing research for visitors
  - Industrial Liaison Program (ILP)
  - Research group retreats, open houses
  - In conjunction with demos
  - On constant display in labs, outside offices
- Poster sessions at conferences
  - Exhibit more research than in talk sessions
  - Work-in-progress descriptions
  - In conjunction with demos

Poster Content

- Guiding principles
  - How would you explain your research to a friend?
  - Posters are similar to talk slides!

- Catchy title and contact info (email, web page)

- Motivation
  - What problem/goal does research address?
  - Why is problem important? interesting?
  - Why are current solutions insufficient?

- Methodology
  - What are different approaches to problem? Pros/cons?
  - Which alternative did you choose?
  - How did you do what you did?

Poster Content (cont.)

- Findings: format is domain-specific
  - Experimental results: performance graphs, tables
  - Prototype implementation description (and evaluation)
  - GUI design principles and screenshot
  - New algorithm and evaluation
  - Description of new method for studying (new) problem

- Conclusions
  - Reminder of problem description
  - Summary of key findings

- Future work
  - What’s the next step (for you, or others)?
Logistics: Visual Presentation

- Posterboard sizes
  - Ex: 22” x 28” to 30” x 42”
- Medium
  - Printed talk slides
    - Ex: PowerPoint
  - Plotter output
- Use illustrations
  - Block diagrams, graphs, screen shots
- Use color for clarity and emphasis
- Use terse phrases, not sentences
- Use large fonts
  - Title: ≥ 60 pt
  - Contact info: ~48 pt
  - Slide titles: 36 - 40 pt
  - 1st level bullets: 26 - 32 pt
  - Lower level bullets: 20 - 24 pt
  - Absolute smallest: 18 pt

Logistics: Oral Presentation

- Audience behavior
  - Browse posters, ask if interested
  - “So, tell me about your project…”
- Prepare ~5 min. summary of poster
- Let audience questions drive detailed discussion
- Practice your spiel out loud before the session

Sample Posters

- Many computer science posters on display
  - 4th and 5th floors of Soda Hall
- Ask grad students/faculty in your research group

Conclusions

- Sharing research findings is important
- Communication medium depends on goals
- Posters
  - Easy to create
  - Applicable to many disciplines
  - Great for interactive discussion with local community
- Rules of thumb
  - How would you explain research to a friend?
  - Use illustrations
  - Use color
  - Use large fonts
  - Use bulleted phrases
  - Practice a short oral summary