

Poster checklist: some tips for designing Stat-ML posters

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Some personal suggestions (via accumulated wisdom) for my own students.

- **Target time.** Broadly, think about three kinds of people who will visit your poster: those who will spend < 1 minute and walk by, those who will spend 3-5 minutes, and those who will spend > 10 minutes. Target the catchier parts (title, section headings, takeaway messages) to the first type, and the content of the poster to the second type. The third type will really want to question *you* more than just read the poster.
- **Font size and photos.** Everything must be readable from 3-4 feet away. Some people may have bad eyesight or may be tired and will not put effort to read small text. The poster title should be short (not necessarily paper title), readable from 10 feet away. Author full names, institutions *and photographs* are a must (people form associations in different ways). Avoid logos, nobody recognizes them except the authors.
- **Avoid TMI.** Nobody likes a poster stuffed with too much information (TMI). Figure out the few key pieces of information that *most* people are likely to care about, and avoid minor nuances that only *you* care about.
- **An example division.** Usually a poster will have 3 columns (but sometimes 2 or 4, depending on layout/size). Focus on conveying intuition, minimize unnecessary equations because they can take very long to process.
 1. The first column could have the problem statement, a couple of motivations, shortcomings of prior approaches, and notation (be minimal, don't necessarily present most general assumptions/results).
 2. The second column could form the main bulk: your one main algorithm, one or two main theorems, how to interpret those results, proof intuition, how it subsumes or improves earlier work.
 3. The last column could have some experiments including their setup and clear graphs with legends and axis labels (which could be simpler and clearer than the paper's graphs). Also, some takeaway messages or conclusions, a few directly relevant references, maybe a QR code to your arxiv paper or software.
- **Colors, diagrams.** Posters are primarily *visual*, they should not contain core dumps directly from papers. Use boxes, arrows, colors, like in flowcharts, or other geometrical visuals to convey high level ideas.
- **Mentally prepare pitches.** Make sure you have thought about (at a high level) pitches of different lengths:
 1. Your first 60-second pitch applies to everyone, and need not involve looking at the poster, but just talking to the people directly, convincing them that the problem is well-motivated, interesting and important. Then ask them if they are on the same page, and would like to know how you address the problem.
 2. Your next 3-minute pitch needs to dive into some details, but not too many. Convey what your new ideas are, what your method does, what guarantees it has (under what assumptions), and briefly show them that it does well empirically. Focus on getting key high-level ideas across. If the work seems too technical, or the contributions are too technical and not conceptual, people will lose interest.
 3. For those who stay longer, turn it over almost fully to them. Ask them what they want to know more about, what questions they have, what they find clear versus confusing.
- **Changing strategy rapidly.** Ultimately, presenting a poster well is about changing tactics on-the-fly, as you learn more about the person you're talking to. If they're experts in the area, maybe you can jump right in. If they're totally clueless, maybe you need to stay high level the whole time. Learn from people's repeated questions which part of your explanation is unclear, so that you can fine-tune it for people coming later.
- **Printouts.** Have one or two full printouts of the paper that very interested people can look at (and return), or that you can point to as an answer to a question. You could also have lots of copies of a "one page summary" of your paper printed out, that you can hand out to people as they come in or leave (as a souvenir).
- **Water bottle, throat lozenges.** Poster sessions can be long and tiring—*you* are the most important device to communicate ideas, *the poster is there to help you*. You have to be energetic, loud (above crowd noise), and your enthusiasm has to be infectious! Drink *warm* water regularly, and carry mints or throat lozenges.