

Presenting at Conferences

A guide for Engineering students

Why present at conferences?

As a research higher degree student, you are encouraged, often required, to present your research at conferences for several reasons:

- Conferences are an ideal forum for communicating your research to experts in your field and discussing your research design and methodology, findings, future directions and recommendations. The research you present can be a completed study, a work-in-progress or a part of your overall project (e.g. a literature review).
- Attending conferences allows you to stay up-to-date with developments in your research field and to be in contact with key personnel, including prospective employers, examiners, publishers and collaborators.
- Conferences inspire your current research. Staying connected and establishing a sense of community not only helps you with your research ideas, but also sustains motivation for your research throughout your candidature.
- You can polish your presentation skills by watching effective experienced researchers and, indeed, learn from the mistakes of less effective presenters.

Participating in conferences

Participating in conference presentations usually involves the following steps:

- **Call for Papers:** Typically, the first step is to be aware of calls for papers in your field. You can learn about these through online discussion threads or bulletin boards, discipline-specific listservs, faculty emails or your supervisor.
- **Abstract Submission:** You then need to submit an abstract to a review committee. The length and precise nature of the abstract will be detailed in the call for papers.
- **Acceptance:** If your abstract is successful, you may be requested to submit the full paper by an indicated date. If it isn't successful, don't be disheartened. The evaluation and feedback that you receive from the reviewers is usually extremely valuable. It can help you learn about academic expectations, amend your original paper and increase the likelihood of it being accepted in other conferences or for publication.

Presentation Types

Major conferences typically allow for the communication of your research to take either the form of an **oral presentation** or a **poster**. **Oral presentations** have the advantage of imparting your research to a wide audience and are usually regarded with prestige. However, they also carry the pressure of presenting to a room full of experts under time constraints. **Poster presentations** are typically less stressful. They allow you to engage in one-on-one interaction with your listeners and can therefore provide more customised feedback on your research. Effective poster design is a precise art in itself see the Academic Skills flyer **Academic Posters** for more detail.

Networking

In addition to presenting a paper, one of the more daunting aspects of conferences can be the pressure of networking with well-known scholars. An Associate Professor at the Department of Computer Science and Engineering at the University of Washington provides the following advice on effective networking practices:

- After a talk, ask a question relevant to the presenter's research. This not only demonstrates that you are informed and interested in the presenter's work, but also increases your chances of being noticed, facilitating your opportunities to chat later.
- Do not simply spend time with people from your own institution; you can do that outside the conference context. Use the time at the conference to meet researchers you do not often have access to.
- Lunch and dinner functions provide important opportunities to establish links with industry for the commercial applications of your research.

Preparing for presentations

- Ask yourself: what does the audience already know and what do they need to know? For purposes of length and detail, remember that if people are interested in your research, they will take the opportunity to read your research paper.
- Formulate a clear structure where, **a**) your aim is stated in the introduction; **b**) your points are explicitly made, linked and supported; and **c**) your conclusion has a clear 'take-home' message.

Academic Skills

- Practice the talk and time yourself. Keep in mind that your time may be shortened by introductions and presenters going beyond the time limit, so remember that some of your slides may need to be omitted.
- If possible, visit the room you will present in when it's not in use. Attend a session held in the same room to identify any potential technical difficulties.
- **1:2** - A general rule of thumb for the number of presentation slides is one slide per two minutes. Note that Engineering audiences tend to be comprised of visual learners; so use visuals and minimise the amount of text that you present on your slides.

Involving your audience

Effective presenters are good at actively involving their audience. The following tips may help:

Make eye contact. Avoid reading notes or talking to the data on the screen. Look at the audience before you begin and throughout your talk. Practice presenting one thought to one pair of eyes, breathing, moving then to the next pair of eyes for the following point.

Project confidence with body posture, voice and movement. Use a posture which focuses attention on your upper body and face: balance your weight evenly on both feet and keep your hands together about waist-high. This is also an easy position to gesture from. Direct your voice to the audience and articulate your words and sentences.

Begin the presentation with a 'hook'. Attract your audience's attention by:

- giving them a problem to think about, e.g. *'Have you ever wished that the ultrasound images of your unborn child were considerably clearer?'*
- stating a remarkable fact, e.g. *'Did you know that prior to the September 11 attacks, fire had never caused any steel framed buildings to collapse?'*
- sharing a story or personal anecdote, e.g. *'When I think about creativity, I'm reminded of the man who invented the microwave oven. He spent years experimenting with radar transmitters when he noticed that, while doing so, the chocolate in his pocket consistently melted.'*

Arrive early. This gives you a chance not only to set up for your talk but also to chat to audience members about their backgrounds, interests and expectations.

Be aware of levels of engagement throughout your talk. Towards the end of a full day of presentations, and in the middle of a talk, audience concentration levels can wane. Re-engage the audience by assigning activities, using humour or giving a stimulating example of your research application.

Presenting your research

During your presentation, make sure you:

State your aim / purpose: Talk about the goals of your research or the purpose of the presentation before discussing techniques. You must first convince your audience of the importance and interest of your work before requiring them to tackle the more technical details.

Contextualise your research: Position your study within past and current literature and methods. This allows you to create a referential framework and perspective for your own work.

Present findings clearly and attractively: Recall that your purpose is to *inform* the listeners of your results. If audience members are interested in the details of your research, they will ask questions, arrange to chat with you after the talk, or read your paper.

Conclude your talk with a powerful message (aka the 'take home' message): Emphasise the major points raised in your presentation and highlight the significance of your research.

Deal with questions effectively: Before the presentation, anticipate likely questions about your research and prepare your answers. During question time, maintain eye contact with the audience member asking the question. Paraphrase their question to ensure that, **a**) you have understood it correctly; and **b**) others in the room have heard it.

If you do not have a direct answer, you can acknowledge the point being made and suggest ways of carrying out further research. You can also ask for their own recommendations and exchange contact details for follow-up.

Finally, remember that:

- *Memories of successful or unsuccessful performances usually outlast those of content* (Thody, 2006).

References and further resources

Evans, D. & Gruba, P. (2006). *How to Write a Better Thesis*. 2nd ed. Melbourne: Melbourne University Press.

Ernst, M. (2004): <http://www.cs.washington.edu/homes/mernst/advice/coference-attendance.html> <accessed April 30 2009>

Notkin, D. (2002): <http://www.icse-conferences.org/2002/advice/notkin.html> <accessed April 30 2009>

Presenting your Research. <http://www.services.unimelb.edu.au/asu/flyers.html>

Thody, Angela. (2006). *Writing and Presenting Research*. London: Sage.

Walters, D. Eric. & Climenson Walters, Gale. (2002). *Scientists must speak*. London: Routledge.

Academic Skills