

A Workshop on Improving "Soft" Skills

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This soft skills workshop has two parts:

- 1. Writing (and Coaching) a One-Draft Thesis/Proposal/Paper**
- 2. Giving a Good Talk, a Necessary Skill**

Motivation

Why should you care about this workshop? Well, your career depends on your ability to communicate. Technical knowledge is necessary but not sufficient. So, you need these skills and the confidence that goes with having them. Why listen to me? Well, I've helped lots of people improve (from all over the world – there is no writing or talking gene), so this advice has been vetted.

Abstract

Part1:

Students and advisors often struggle mightily to get a Ph.D. thesis done. In Part 1 I will describe a method my graduate students and others use to write their theses in one draft, with a nod towards other writing such as a thesis proposal, a grant proposal, and a research paper. The method includes focusing on contributions, and designing an outline down to paragraph topic sentences, fleshing out those paragraphs, and then incurring only small scale edits. This method is not magic or luck, and does not depend what your birth language is. It is skillfully applied design practice derived from software engineering, or from any design discipline. It is also relevant if you merely (ha!) need to write a research paper, but the larger the project, the more important designing becomes.

You will get a lot more out the workshop if you prepare for it.

Prepare. You should:

- Read the accompanying paper " Design: The Key to Writing (and Advising) a Ph.D Dissertation in One-Draft (feel free to pass it on to your friends). I will assume you have read the paper.
- Spend no more than two hours examining a thesis (from your area or anywhere else) looking not at its content but at its form: what chapters?, where are contributions stated? how does it begin? What is not there that might have been there?
- Pick out two research papers, one you enjoyed reading, and one that was a trial, and then reverse engineer (parts of) them to see where the writing caused you pleasure or pain. That is, **read like a writer**. Feel free to email me your thoughts.

Part 1 will also cover understanding abstracts, shortening text, and organizing literature reviews.

Prepare. You should:

- Read the accompanying paper "Thinking about Abstracts"

- do the exercise about abstracts in the accompanying exercise file, and **email it to me by Tuesday, February 9.**

Prepare. You should:

- Read the accompanying paper "Squeezing Text"
- Find some text (about 1k words long) that you find wordy and try shortening it.

Prepare. You should:

- Read the accompanying paper "Thinking about Literature Review / Related Work Diagrams".
- Look at some papers you have read recently to see how the authors have organized their related work sections.

Finally, if you have a burning writing issue, you might send me email beforehand asking if I can address it in the workshop.

Part 2:

Public speaking is feared by many people, but it is just a skill that you can learn. In Part 2 I will give practical advice on how you can plan and deliver a good talk, and do so with confidence, something many people (including students, post-doc, and professors) lack skills in and fear doing. The key point to learn is that your talk is about the messages you want the audience to receive. When you know what you want to accomplish, then you can more readily make decisions about how to do it. You will also learn how saying “you” improves your messages’ reception and about errors that presenters commonly make and how to avoid them.

Prepare. You should:

- Before the workshop, where you are an audience member (a class or colloquium), **listen like a speaker**. Try to figure out what worked or didn't for a speaker, and then imagine how you would have said things differently.

Also, if you have a burning issue about talking, you might send me email beforehand asking if I can address it.

During the workshop, there will be ample time for questions. There will also be exercises to sharpen your skills.

I am particularly interested in helping students who have an upcoming presentation that they would like to improve.

Bio

John Carlis is a Professor of Computer Science and Engineering and Biomedical Informatics and Computational Biology. For the former he is Director of Undergraduate Studies and for the latter he is Associate Director of Graduate Studies. He is a recipient of multiple teaching awards. His interdisciplinary research is in the use of Database Management Systems and extending them in biomedical contexts, including HIV-1, oral cancer, and breast cancer.