How to Write CHI Papers (Third Edition)

Lennart E. Nacke
HCI Games Group, Games Institute, Stratford
School of Interaction Design and Business
University of Waterloo, Waterloo, ON,
Canada
lennart.nacke@acm.org

ABSTRACT

We base everything that we do as researchers on what we write. Primarily for graduate students and young researchers, it is hard to turn a research project into a successful CHI publication. This struggle continues for postdocs and young professors trying to author excellent reviews for the CHI community that pinpoint flaws and improvements in research papers. This third edition of the successful CHI paper writing course offers hands-on advice and more in-depth tutorials on how to write papers with clarity, substance, and style. It is structured into three 80-minute units with a focus on writing CHI papers.

CCS CONCEPTS

• Human-centered computing → Human computer interaction (HCI)

KEYWORDS

Writing; Reviewing; Research Methods; Style; Clarity

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	Schedule
Unit 1	**Structure**
0-9	Intro and Goals
10-49	Micro Lecture: Structuring your Introduction and Research
50-80	Tutorial: Dissecting a CHI Paper
Unit 2	**Abstract and Intro**
0-10	Recap
11-80	Exercise: Writing the Abstract and Introduction
Unit 3	**Full Paper**
0-10	Revision of CHI Paper Structure
31-80	Tutorial and Exercise: Bullet pointing the full CHI paper

Table 1: The schedule for three 80-minute course sessions at CHI with a break in between.

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1 INTRODUCTION AND COURSE BENEFITS

Writing papers is at the heart of our craft as CHI researchers. Knowing what reviewers are looking for in a paper helps us write and structure papers more clearly. Yet, skillful writing sometimes seems ephemeral to us when trying to structure our research ideas around what we perceive as the demands of the CHI community. In the last two editions of this course, I tried to teach both paper writing and reviewing in 2 and later three course units. However, most of the feedback from participants was focused around extending the time for teaching paper writing and focus on the writing exercises more. Hence, I have reworked the course structure with even more focus on writing exercises. While some helpful work exists online [5] with lots of writing and research structure advice for CHI authors [1,2,9], it has only recently been synthesized into this hands-on course format.

Students will learn the practical writing skills that enable them to "trim the fat" in their writing and focus on bringing the essential information about their research across in the first course unit (some of the advice being taken from essential style guides [6-8]). They will also learn to dissect a CHI paper into its units and map those units to their research structure. In the second course unit, we will focus on writing the introduction and abstract. In exercises and one-on-ones with me, they will learn how to structure their CHI paper around a research narrative that focuses on solving the main problem and outlining a strong contribution using exploratory learning [3]. In the third course unit, we focus on a hands-on tutorial the helps them outline their CHI papers by section and draft in the bullet points for each section that will eventually lead to the full paper. By following a clear structure and focusing on lean writing, participants will learn what reviewers are looking for and how to signpost this information to make papers more attractive to read.

Participants will leave this course with improved writing skills, which they will have exercised during the course and also a wealth of knowledge about CHI paper structure, style, and content, which will be expanded online at the URL: http://chicourse.acagamic.com

RESOURCES

To expand the course, we will provide resources that tie in with our Games User Research (Oxford University Press) book at www.gurbook.com.

2 INTENDED AUDIENCE

This course introduces principles about writing (and to a lesser extent reviewing) for CHI to a junior audience. However, this does not mean that this course is not useful for senior CHI researchers, but the primary target audience are junior researchers. Thus, this course is particularly useful for young researchers, ranging from graduate students to postdocs and junior faculty. The expectation for the course audiences is that people have at least tried to submit a paper to CHI before (not necessarily that they have had one accepted), so that they are familiar with basic PCS terminology and the concept of the CHI conference (and CHI research in general).

3 PREREQUISITES

The are no prerequisites for this course other than visiting the online course materials before the conference to familiarize oneself with some of the course concepts and to listen to the interviews.

4 CONTENT

The course is structured into three units (see Table 1), the first one on research structure, the second one on Abstract and Introduction, and the third one on a hands-on writing tutorial for CHI papers. At the start of the **first unit**, the participants are introduced to the course instructor and the course goals:

- Become a better writer by learning how to avoid unnecessary words and give each sentence a strong meaning
- Understand the goals of CHI research and what makes a strong CHI contribution
- Learn how to structure your paper around a compelling research narrative to emphasizes your research problem and solution as main drivers

This is followed by a micro lecture and a hands-on tutorial.

4.1 Unit 1 Micro Lecture: Structuring Your Research and Introduction

This lecture introduces the positioning of research papers and how to narrow the research problem space toward a unit that can be presented at CHI. It will give the participants an overview of what reviewers are looking for in an abstract and an introduction of a CHI paper. I will showcase some video interview that I did with senior CHI researchers (see https://www.youtube.com/watch?v=kpWMncsMBoQ&list=PLXaGnDxciHwjaJZMDfb6j9uwLwXMHjsaq). It closely follows four questions (i.e., What's the real-world problem that you are trying to solve? Why is it important to solve this problem? What's the solution that you came up with to solve it? How do you know that the solution is a workable solution to your initial problem?) that the participants will need to answer.

INSTRUCTOR BACKGROUND

Lennart E. Nacke, Ph.D., is an Associate Professor for Human-Computer Interaction and Game Design at the University of Waterloo. He has served on SIGCHI program and steering committees and taught University graduate classes on HCI research methods. Dr. Nacke has co-organized many workshops for CHI over the past five years; he also chaired the CHI PLAY 2014 and Gamification 2013 conferences, served as technical program co-chair for CHI PLAY 2015 and CHI Games and Play subcommittee co-chair for CHI 2017, INTERACT 2019 Full Papers Co-Chair, and was the chair of the CHI PLAY steering committee until 2018. He has also reviewed hundreds of papers and gotten lots of his own submissions rejected from CHI (sometimes for good reasons but definitely not this year).

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5 PRACTICAL WORK

5.1 Unit 1 Tutorial 1: Dissecting a CHI Paper

For this tutorial, participants will get a published CHI paper and discuss how some of the excellence criteria learned in the first unit can be applied to the writing found in the paper. I will run this exercise as a structured discussion (40 minutes).

5.2 Unit 2 Exercise: Writing the CHI Abstract and Introduction

In many of the interviews that I have conducted with senior CHI researchers, the abstract and introduction have been mentioned as the most important structural parts of a CHI paper. In this exercise, I will give the participants work materials for building clear abstracts and introduction to their CHI research work that helps to structure their introduction section (30 minutes). The written paragraphs are passed around and discussed in groups with regards to answering the research questions (20 minutes).

5.3 Unit 3 Tutorial and Exercise: Bullet pointing the CHI paper

Building on the abstracts and introductions that we have built in the previous exercise, we will then outline the rest of the CHI paper with bullet points. I will show a couple of examples (10 minutes) and then participants will write their own bullet points (20 minutes), then we will discuss in front of the class how effective those bullet points communicate the research goals using examples from participants (20 minutes).

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