# How to Write a Paper for India HCI 2020

**Anirudha Joshi**

IIT Bombay

Mumbai 400076

anirudha@iitb.ac.in

## Abstract

This 160-minute course builds on the experience of teaching a similar course in India HCI 2018. It aims to teach participants how to write research papers. It is particularly designed for first-time paper writers in the Indian interaction design / HCI community. It is meant for students and new professionals from the fields of design, computer science, cognitive science, ergonomics etc. In this course, I will cover the scope and the contents of an HCI research paper, the style and structure of writing a research paper, and the paper review process that authors should keep in mind. While this course will focus on writing papers and notes, some learnings from this course could be extended to writing other types of materials such as case studies, posters and demos.

## Author Keywords

Interaction design; HCI; writing; research papers.

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## Introduction

While research advances knowledge, a research paper is the means by which the knowledge is reviewed and disseminated. A research paper remains a primary unit

of knowledge. However, for many new authors, writing a good research paper is enigmatic. Even for experienced researchers, writing a good research paper can be quite challenging. Yet, a well-written research paper is very satisfying for the author and very insightful for the reader.

## Learning Objectives

The objective of this course is to give an introduction to writing research papers. At the end of the course, the participants should be able to identify which of their work could be submitted as a research paper, and how it should be written up. I hope the course will be able to help authors shed some misunderstandings about paper writing. I also hope that this course will help increase the number of submissions at the India HCI conferences in future.

## Contents

The contents of this course are partly inspired by Lennart Nacke's course at CHI [1], partly by a presentation by Keith Vertanen at the Summer School on Research Methods and Approaches to Text Entry and Other Interaction Techniques [2] and partly by the relatively small number of paper submissions that we otherwise receive at the otherwise successful India HCI conferences.

The course will begin with a quick review of what research is and how it helps advance human knowledge. It will then position the research paper as the unit of that knowledge.

The course will then move on to the scope and content of a typical HCI research paper. It will discuss what we mean by contribution, novelty, rigour, validity and

reliability of research in a paper. We will also discuss the wide variety of contents that a HCI conference typically gets, and what is normally expected at such conferences.

The course will next discuss the structure of a typical HCI research paper (including abstract, introduction, related work, method, results, discussions and conclusions) and the style of writing that reviewers of HCI conferences typically expect in research papers. We will discuss the common pitfalls that new authors experience.

Finally, the course will explain the review process that most HCI conferences follow (including the submission system, deadlines, chairs and reviewers, reviews, acceptance and presentation). It will also deal with how to write a rebuttal if asked for, and how to deal with a rejection.

The course will be interactive and the participants will have opportunities to get answers to their questions. The course will end with the formation of a peer group on an appropriate social network that participants can use to keep in touch and get early feedback on their work.

## Intended Audience

This course is intended for those who have interest in HCI and overlapping areas. This includes students (including undergraduate, masters and new PhD students) as well as young professionals who would like to learn the science and art of writing research papers. While some prior experience in doing research and writing research papers will help, the course is not

intended for those who have a long experience in writing research papers.

## Reading Material and Pre-requisites

Before participating in the course, I ask participants to view the video interviews by Lennart Nacke of Kasper Hornbæk, Vero vanden Abeele and Regan Mandryk [3, 4 and 5]. In preparation of the course, I also ask participants to read four of my research papers [6 to 9].

## References

1. Lennart Nacke. 2018. How to Write CHI Papers: Second Edition. CHI EA 18. doi>10.1145/3170427.3170653

2. Per Ola Kristensson, Mark Dunlop, Keith Vertanen, Ahmed Sabbir Arif, Anirudha Joshi. 2018. A Summer School on Research Methods and Approaches to Text Entry and Other Interaction Techniques https://indiahci.org/sigchischool/researchmethods2018/

3. Lennart Nacke, Kasper Hornbæk. 2017. How to write CHI papers - Lennart Nacke interviews Kasper Hornbæk https://www.youtube.com/watch?v=Fam17NTdSEI

4. Lennart Nacke, Vero vanden Abeele. 2017. How to write CHI papers - Lennart Nacke interviews Vero vanden Abeele https://www.youtube.com/watch?v=ghWwhrHGWlk

5. Lennart Nacke, Regan Mandryk. 2017. How to write CHI papers - Lennart Nacke interviews Regan Mandryk https://www.youtube.com/watch?v=kpWMncsMBoQ

6. Anirudha Joshi, Mandar Rane, Debjani Roy, Shweta Sali, Neha Bharshankar, N. Kumarasamy, Sanjay Pujari, D. Solomon, H. D. Sharma, D.G. Saple, Romaine Rutten, Aakash Ganju, Joris Van Dam. 2011. Design Opportunities for Supporting Treatment of People Living with HIV / AIDS in India. INTERACT 2011.

7. Anirudha Joshi, Mandar Rane, Debjani Roy, Nagraj Emmadi, Padma Srinivasan, N. Kumarasamy, Sanjay Pujari, D. Solomon, Rashmi Rodrigues, D.G. Saple, Kamalika Sen, Els Veldeman, Romaine Rutten. 2014. Supporting treatment of people living with HIV / AIDS in resource limited settings with IVRs. CHI 2014.

8. Girish Dalvi, Shashank Ahire, Nagraj Emmadi, Manjiri Joshi, Anirudha Joshi, Sanjay Ghosh, Prasad Ghone, Narendra Parmar. 2016. Does prediction really help in Marathi text input?: empirical analysis of a longitudinal study. Mobile HCI 2016.

9. Pabba Anu Bharath, Charudatta Jadhav, Shashank Ahire, Manjiri Joshi, Rini Ahirwar, Anirudha Joshi. 2017. Performance of Accessible Gesture-based Indic Keyboard. INTERACT 2017.

**Justification for the Course**

While the India HCI conference has been consistently attracting a large number of participants, it has never attracted a commensurate number of submissions. A large part of the Indian HCI community is practitioners, though as the field matures, there is a growing interest in research. This course is an attempt to develop paper writing skills and culture in the community. A goal is also to set up a support network to nurture new paper writers.

**Expected Background of the Attendees**

As mentioned above, the course is targeted to students and young professionals with interest in HCI or in overlapping areas. There are no further expectations from the participants.

**About Anirudha Joshi**

Anirudha Joshi is professor in the interaction design stream in the Industrial Design Centre, IIT Bombay, India. He has published several papers in conferences and journals. He has been teaching and guiding PhD students since 2011.