
How to: Peer Review for CHI (and Beyond)

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Abstract

A key challenge for people that are new to reviewing is pitching the review at the right level, and getting the tone and structure of a review right. This course aims to help participants understand a) the different expectations of different venues and submission types, b) the processes they use to make decisions, and c) good techniques for producing a review for these different circumstances. Combined with developing a good understanding of these different expectations, participants have a chance to critique anonymised proto-reviews, and try to guess the venue they are written for and the recommendation they make.

Author Keywords

Peer Review; Reviewing; Reviewer;

CCS Concepts

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

Introduction

A key challenge for new reviewers is comprehending the expectations that different venues (journals verses conferences verses workshops) may have, for different types of submissions (full papers verses demos verses late breaking work), and the subsequent decisions processes for each. Consequently, it is not uncommon for new reviewers to be

Unit	Part I
1	Venues and Submission Types
2	Roles, Processes, & Decisions
Lunch	
Part II	
3	Producing Useful Reviews
4	Critiquing Examples of Reviews

Table 1: Expected Schedule

unnecessarily harsh or overly lenient on issues for a particular venue and type, and to put too much or too little time into reviews. This problem is exacerbated in highly interdisciplinary research fields like HCI, where even established reviewers need to be aware of expectations for different types of work [8].

At the same time, we are becoming increasingly dependent on expanding the reviewer pool, making tweaks annually to CHI's reviewing process to reduce demand in the face of annual growth in submission numbers [3]. Meanwhile, people in our field raise concerns in community forums¹ about the experience levels of reviewers looking at many CHI papers, whilst others recommend more stringent forms of review to increase rigour in our field [6]. This growth and its demand on increasingly novice reviewers is a concern that many fields experience and try to confront [1, 10].

Encouraging people to review is also a challenge, as we feel busy with many demands. With many experts being needed further up the reviewer framework (as e.g. senior reviews (ACs) or subcommittee chairs (SCs)), we become dependent on new novice reviewers perhaps reviewing for the first time. Many students learn by being coached by their supervisors, perhaps by the supervisor giving students papers to draft-review before completing the review themselves. Many reviewers, however, do not have this opportunity.

Learning Outcomes

This course² is designed to help people to:

1. Understand the different types of submissions that can be reviewed

¹[CHI Meta Discussion](#)

²<http://bit.ly/peer-review-tutorial>

2. Understand the different processes used by different venues (for different types of submissions)
3. Reflect on what senior reviewers want from a review (and therefore how they might be structured)
4. Critique example reviews for different types of submissions for different types of venues

Audience and Prerequisites

This course is aimed at new PhD students, or undergraduate students intending to pursue a research programme, or indeed anyone that feels that they are 'new' to reviewing and want to broaden their experience.

There are no prerequisites to participating in the course.

Course Content

The course, which has been delivered in full at 3 previous occasions, is broken up into two main halves: comprehension of venues and submission types, and understanding the components of a good review.

Part 1 is focused on the first two learning outcomes. It is intended to help participants reflect on why we submit different types of submissions to different venues, and what those venues want. For example, a workshop typically wants material that invokes discussion and presents exciting early ideas. Where as full peer-reviewed venues like journals and some high ranking conferences, want important, novel, significant, and rigorous submissions. By doing this, we also discuss the different roles involved in making the decision, and the processes used by people in those roles to make them. We compare, therefore, typical journal processes (including advertised flow diagrams, and the instructors experiences as a Deputy Editor and Associate Editor), extreme examples of conference processes (as used

at e.g. CHI), and those used by small groups of workshop organisers.

The process involved in the first part also serves as a chance for the instructor to comprehend the variety of research fields (in this case different fields relating to CHI) in the room, and the types of venues people might submit to.

Part 2 is focused on considering the structure of reviews, based upon the reflective understanding of venues built up in part 1. The purpose of a review is considered from the perspective of different people that will read it, using scenarios from different types of venues. This includes both what will be useful for the authors, and what will be useful for the senior reviewers. For this particular delivery context, the course will increase the focus on recommendations specifically from CHI for reviewing papers and the needs of ACs, SCs, and papers chairs, but still consider other types of venues both within and external to CHI.

This process is then followed by the critique of a series of anonymised proto-reviews (based on reviews that the instructor has had access to in the past, but not on reviews of the instructors own papers), which comes in two challenges: a) identifying the type of venue the review was produced for, and b) what the recommendation of the author is. This is complemented by activity that examines 5 different anonymised proto-reviews for the same journal article, which vary dramatically in their recommendation and quality.

Practical Work

The course is perhaps ~75% practical work, as can be seen from the slides submitted alongside this proposal (which is all of the slides used in the course).

Part 1 uses whiteboards, post-it notes, flip-chart paper,

and marker pens to take participants through a series of 8 incremental activities. The majority of the first half, therefore, is facilitated workshop activities around tables, augmented with information in slides as and when relevant; the outcome of the activities is shaped by the knowledge and experience of the instructor to reach certain final states.

Part 2 includes the majority of 'taught material', however it still includes one minor activity (looking at example review forms as a group), and the main review-critiquing activity that makes up the entirety of the 4th unit. This final unit is 100% discussion-led practical work, critiquing a) whether reviews match a venue, b) whether they match the recommendation, and then c) whether each of 5 reviews for the same article provide good and bad feedback.

Resources

Although certain formal guides exist (e.g. [12]), these vary heavily from discipline to discipline. Instead, as we progress through the content of the course, we consider official resources produced by publishers like Springer [11], Elsevier [5], and Nature [13], as well as advice from experts in our own community [2, 4, 7, 9]

Participants are able to keep copies of the example reviews, and are given a digital handout with key information slides and links to resources.

Instructor Background

The course is delivered by Dr Max L. Wilson, as Associate Professor at the University of Nottingham. Max, who currently sits on the CHI Steering Committee, has been a reviewer for CHI for over 10 years, and has reviewed for many other conferences including CSCW, UIST, SIGIR, CHIIR (and its former IliX), ISWC, WWW, UbiComp and Mobile-HCI. Max has also reviewed for journals including: JASIST, JWS, IJHCI, IP&M, TOIS, TOCHI.

Max has acted as a senior reviewer (AC) for CHI and CSCW since 2014, and now serves as a Subcommittee Chair for the Understanding People subcommittee. Max has been an Associate Editor for IJHCS and IP&M, and now serves as the Deputy Editor for IJHCS. Max has also acted as Papers Chair for IliX2014, posters chair for IliX2012, Courses Chair for CHI2016 and CHI2017, Panels Chair for CHI2018, and on the Best Paper Committee for CHIIR2018.

Max has delivered this particular course on four prior occasions, at national PhD student events, and at specific universities in the United Kingdom.

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REFERENCES

- [1] P. C. Baveye and J. T. Trevors. 2011. How Can We Encourage Peer-Reviewing? *Water, Air, & Soil Pollution* 214, 1 (01 Jan 2011), 1–3. DOI: <http://dx.doi.org/10.1007/s11270-010-0355-7>
- [2] Dan Cosley. 2014. How I review papers. (2014). <http://blogs.cornell.edu/danco/2014/06/12/how-i-review-papers/> Accessed on: 15/10/2019.
- [3] Anind Dey and Shengdong Zhao. 2018. CHI 2019 Changes. (2018). <https://chi2019.acm.org/2018/09/11/chi-2019-changes/> Accessed on: 15/10/2019.
- [4] Niklas Elmqvist. 2015. How to Review HCI/Visualization Papers. (2015). <https://sites.umiacs.umd.edu/elm/2015/12/19/how-to-review-hcivisualization-papers/> Accessed on: 15/10/2019.
- [5] Elsevier. nodate. How to conduct a review. (nodate). <https://www.elsevier.com/reviewers/how-to-review> Accessed on: 15/10/2019.
- [6] Steve Haroz. 2019. Proposal for amending CHI guides for authors and reviewers. (2019). https://transparentstatistics.org/guide_transparency/ Accessed on: 15/10/2019.
- [7] Ken Hinckley. 2015. So You're a Program Committee Member Now: On Excellence in Reviews and Meta-Reviews and Championing Submitted Work That Has Merit. (January 2015).
- [8] Marco Pautasso and Cesare Pautasso. 2010. Peer Reviewing Interdisciplinary Papers. *European Review* 18, 2 (2010), 227–237. DOI: <http://dx.doi.org/10.1017/S1062798709990275>
- [9] Aaron Quigley. 2011. How to write a good review in Computer Science. (2011). <https://aaronquigley.org/research/> Accessed on: 15/10/2019.
- [10] Jonas Söderlund and Rene M Bakker. 2014. The case for good reviewing. *International journal of project management* 32, 1 (2014), 1–6.
- [11] Springer. nodate. How to peer review. (nodate). <https://www.springer.com/gp/authors-editors/authorandreviewertutorials/howtopeerreview> Accessed on: 15/10/2019.
- [12] J. Matthias Starck. 2018. *Scientific Peer Review: Guidelines for Informative Peer Review*. Springer Spektrum. 60 pages.
- [13] Mathew Stiller-Reeve. 2018. How to write a thorough peer review. *Nature* (2018).