Proposal for changes to the CHI reviewing guidelines

This document provides a list of suggested changes to two different documents: 1) the Guide to Reviewing Papers and 2) the Guide to a Successful Submission. Suggested changes are meant to encourage and promote transparency in research reporting.

Change proposals are indicated in ~~pink for deletions~~ and in blue for additions. Text in black has been left unchanged.

Contributors are, in alphabetical order:

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Fanny Chevalier is an Assistant Professor in the Departments of Computer Science and Statistical Sciences at the University of Toronto. She is interested in addressing the challenges involved in the design, implementation, and evaluation of novel interactive tools supporting visual analytics and creative activities, with primary focus on interactive tools aiming to improve data visualization and statistical literacy. Her website is: fannychevalier.net

Pierre Dragicevic is a permanent research scientist at Inria since 2007, and studies information visualization and HCI. He is interested in reforming statistical practice in these fields, with a focus on replacing dichotomous testing with estimation thinking. He gives regular talks (e.g., at the BELIV 2014 biannual workshop and at the BioVis 2016 conference) and publishes papers on the topic. He also maintains a Web page with reading material: www.aviz.fr/badstats.

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Steve Haroz is a research scientist at Inria. He researches how the brain perceives and understands visually displayed information, and he has experience with the experiment design and statistical practices in both computer science and psychology. Steve also maintains a list of InfoVis publications which include statistically analyzed quantitative experiments: steveh.co/experiments

Helen Ai He is an independent researcher and artist. She completed her PhD in Human-Computer Interaction at the University of Zurich. Her research explores the augmentation of Computer-Mediated Communication tools to support cross-cultural and multilingual collaboration; persuasive eco-feedback technologies; and interactive public art to address loneliness and isolation in an increasingly digital world. Her website is: www.helenaihe.com.

Elaine M. Huang is an Associate Professor of Human-Computer Interaction at UZH and head of the People and Computing Lab at the Department of Informatics. Her work focuses on qualitative methods such as interviews for data collection or affinity diagramming for data analysis. Her research works are in areas such as supporting cross-cultural communication, developing tangible methods for data analysis, facilitating design in sustainable HCI, improving interaction with home automation technologies, and designing to support mental health. Her website is: http://zpac.ch/huang

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Christian Remy is an Assistant Professor in the Digital Creativity Lab at Aarhus University in Denmark. His work and research interests are in a wide range of topics within the field of HCI, including but not limited to design and creativity, sustainability, and issues of evaluating research. His website is: http://christianremy.com

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Guide to Reviewing Papers

Original document here: http://chi2019.acm.org/guide-to-reviewing-papers/

The proposed changes to this document are in the Prior Publication and Replicating Work section.

Prior Publication

Content appearing at CHI should be new and ~~ground-breaking~~ groundbreaking. Therefore, material that has been previously published in widely disseminated archival publications should not be republished unless the work has been significantly revised. Guidelines for determining "significance" of a revision are stated in the ACM Policy on Pre-Publication Evaluation and the ACM Policy on Prior Publication and Simultaneous Submissions. Roughly, a significant revision would contain more than 25% new content material (i.e., material that offers new insights, new results, etc.) and significantly amplify or clarify the original material. These are subjective measures left to the interpretation and judgment of the reviewers and committee members – authors are advised to revise well beyond the policy guidelines.

An exception is for work that has previously been presented or published in a language other than English. Such work may be translated and published in English at CHI. The original author should typically also be the author (or co-author) of the English translation, and it should be made clear in your submission's abstract that this is a translation.

Also note that non-archival venues, such as workshop presentations, posters, and CHI's own Late Breaking Work do not count as prior publications. Furthermore, a CHI paper should not be rejected on the grounds that it overlaps with work developed independently that was published after the CHI submission was made, during the review period. In other words, work that the authors couldn't have known about shouldn't count against them.

Replicating Work

~~Note that this~~ The policy on prior publication refers only to re-publication of one's own work; this does not preclude publication of work that replicates other researchers' work. Novelty is highly valued at CHI, but constructive replication can also be a significant contribution to human-computer interaction, and a new interpretation or evaluation of previously-published ideas can make a good CHI paper. For future replications to be possible, however, submitted work must include sufficient information. Efforts to include complete, well-organized supplementary material facilitating replication, such as software, analysis code and data, should be rewarded. ~~Also note that a CHI paper should not be rejected on the grounds that it overlaps with work developed independently that was published after the CHI submission was made, during the review period. In other words, work that an author couldn't have known about shouldn't count against him or her.~~

Transparency

Lack of transparency in the way research results are reported can be a ground to doubt the contribution. See the "Transparency" section in "Guide to a Successful Submission" for a discussion of transparency in different contribution types.

Guide to a Successful Submission

Original document here: https://chi2019.acm.org/guide-to-a-successful-submission/

The proposed changes to this document are only in the Replicability section of the original document.

~~Replicability~~ Transparency

~~CHI Papers are expected to include enough detail to allow researchers or practitioners to replicate both core technology and experimental methods. This doesn't mean that it needs to be easy for others to replicate your work; compelling studies often require access to unique user populations, and compelling technology may require rare or expensive hardware. But readers should understand how they would reproduce your work.~~

CHI papers should strive for research transparency regardless of the contribution type and methodology. Different contribution types, (e.g. technical contributions, quantitative studies, and qualitative studies) use different criteria for assessing transparency.

Contributions that are technology-oriented (e.g., a new technique or algorithm) **and contributions that are quantitative studies** (i.e., experiments with statistically analyzed results) are expected to be verifiable, reproducible (e.g., others should be able to rerun the interactive system or rerun the analysis code with the original data) and replicable (e.g., others should be able to independently recreate the interactive system or rerun the same experiment with different participants). Papers with these contributions should include enough detail for an independent researcher or practitioner to (1) independently evaluate the correctness, validity, and reliability of your software and/or analyses and (2) reproduce and replicate both core technology and experimental methods.

~~In particular, a~~Algorithms ~~or~~ and ~~analysis~~ statistical analyses should be described with significant detail. Wherever possible, it's fine to save space by referring the reader to prior work for particular steps in your analysis, so long as the overall approach remains readable. Pseudocode is extremely helpful where algorithmic contributions are involved.

~~Replicability~~ Transparency is often a great area for "beta-testing" your paper with a colleague or friend. Ask a colleague to read your paper and list back the important steps

you used in data collection and analysis. Did he or she leave any steps out? If so, you may need to add more detail or appropriate references.

~~This doesn't mean that it needs to be easy for others to replicate your work; compelling studies often require access to unique user populations, and compelling technology may require rare or expensive hardware. But readers should understand how they would reproduce your work.~~ While some independent researchers may have difficulty fully replicating your work — e.g., if the work requires access to unique user populations or rare or expensive hardware — an independent researcher who has access to these resources should ideally be able to reproduce your work.

Contributions that follow a qualitative research approach (i.e., which most of the time incorporate researchers' subjective interpretation as part of the method) should be transparent about the decisions made, their underlying rationales, and the procedures followed in the design of the research study and reporting of findings. This should include clear explanations of and justifications for the theoretical or conceptual basis for the study, choice of methods employed in every stage of the study, participant-selection process, considerations of ethical issues, and procedures followed for data collection and analysis. ~~Ethical research practices are central to the validity and trustworthiness of any study. Hence researchers should describe the measures they have taken to ensure that the participants' privacy and consent are respected and provide details regarding their role in the study, access to participants, data collection and storage, and follow the appropriate ethical guidelines required by the local conditions by which the research has been created. This includes but is not limited to organizations (e.g. University), and/or ethical boards (e.g. IRB), and/or grant/funding institutions (e.g. EU or NSF), and/or other types.~~ In cases where necessary prior permissions have been obtained to disclose any of the collected data (e.g., observation notes and interview transcripts) and documented researcher notes, making these data available would be welcome additions to the contributions.

The reporting of qualitative research findings should strive to show the "big picture" while also sufficiently contextualizing individual findings. The authors should make explicit how the themes were identified or constructed from the data, and whether each conclusion was drawn from outstanding instances or general trend among participants. They should also articulate any assumptions, preconceptions, or potential biases of the researchers. Communicating the research process in sufficient detail will enable reviewers to assess the rigor of the studies and empower others researchers to adopt the approaches, extend the work, and transfer the findings to other similar settings.

Sharing research material: While the paper should provide as much information as possible to enable verification, reproduction, and replication, some details such as source code, analysis code, detailed hardware specifications, interview protocols, and collected data may not be shareable within the paper itself. Reviewers welcome and even expect all such material to be available. These resources are most reliably shared by posting to a publicly available open-access repository with a persistent identifier (e.g., a registration on the Open Science Framework, an open-access university repository, or an independent repository listed on www.re3data.org). Note that the ACM policy does not limit the use of specific repositories for the purpose of archiving supplementary materials, and that some repositories, including the Open Science Framework, allow anonymous posting of materials for reviewers. In some situations, you may not be able to share material such as sensitive data or proprietary code. In these cases, we advise you to share as much as possible and explicitly state in your paper why the rest cannot be shared. For example, while code for novel algorithms or designs may be protected by intellectual property, code for analyzing study data rarely requires protection, and access to this analysis code can be crucial for assessing the validity of your study's conclusions. While we don't expect you to share sensitive data or proprietary code, we encourage you to share as much non-sensitive and non-proprietary code as possible to help reviewers scrutinize, replicate and reproduce your results. This will increase the chances of your paper getting accepted.

~~**Submissions will be criticised if their contributions cannot be replicated; letting others build on your work is the entire purpose of a CHI Paper.**~~ **Research transparency is of utmost importance in a CHI paper. It allows reviewers to understand and assess submitted work thoroughly, and it allows members of the research community to understand, analyze, and build upon the work in published CHI papers. As such transparency is taken into account very seriously in the review process.**