
Instructions for ContinualAI Unconference Pre-registration Submissions

Anonymous Author
Anonymous Institution

Abstract

This document starts by describing the pre-registration format, providing guidance for how to structure submissions. It then provides formatting instructions for the paper.

The Abstract paragraph should be indented 0.25 inch (1.5 picas) on both left and right-hand margins. Use 10 point type, with a vertical spacing of 11 points. The **Abstract** heading must be centered, bold, and in point size 12. Two line spaces precede the Abstract. The Abstract must be limited to one paragraph.

1 PRE-REGISTRATION FORMAT

In this section we first describe the general pre-registration format and stages, followed by explicit guidance on how to structure submissions.

1.1 Overview

Across an increasing number of scientific fields, pre-registrations and registered reports have become commonplace to improve the rigor and incentives of research publications. Our pre-registration process is similar to a previous NeurIPS workshop, see <https://preregister.science/> for paper examples. For a more general understanding across fields, see <https://www.cos.io/initiatives/registered-reports>.

In summary, pre-registration ensures scientific excellence through a two-stage submission procedure that separates the quality of scientific hypotheses from potentially negative downstream empirical analysis. In the first stage, researchers write a proposal with well-articulated ideas and a thoroughly outlined experimental protocol, which is peer-reviewed on the OpenReview platform. Upon acceptance, researchers can incorporate feedback through active dialogue at CLAI Unconf. In the second stage, researchers

will rigorously evaluate their ideas, with the final paper published in CLAI Unconf’s Proceedings of Machine Learning Research (PMLR), after a light second round of peer-review to confirm rigorous execution.

1.1.1 First stage: pre-registered proposal

In the first stage, a proposal paper is written, outlining all background, proposed methods, hypotheses and a carefully thought-out experimental protocol. This proposal is then thoroughly peer-reviewed in a double-blind process, judging the technical correctness, quality of presentation, soundness of the hypothesis, rigor and feasibility of the outlined experimental protocol. Upon acceptance, the proposal’s ideas are presented at CLAI Unconf to share hypotheses and planned experimentation, as well as actively gather feedback.

For emphasis, the pre-registered proposal does not yet include the empirical evaluation. However, with the exception of the experimental protocol that outlines how experiment will be done, the remaining recommended sections can be written in a similar way to a “standard” paper. In contrast to an often typical focus on “state-of-the-art” results, the focus is simply shifted more towards convincing readers why the topic is of interest, why the approach is novel, and what/why the outlined approach is expected to contribute beyond existing literature. To this end, **there should be at least one (or multiple) marked, well-motivated hypotheses that clearly define the authors’ expectation in terms of later obtained (empirical or other) results.**

The second stage, detailed below, will allow only minor modifications to the structure and content of these sections, in order to incorporate later empirical findings.

1.1.2 Second stage: final published paper

In a second stage, the proposed research is conducted and the results are documented for publication in additional experiments and discussion sections of the paper. The earlier pre-registered parts of the paper remain untouched, with only minor edits being allowed to summarize the final findings in the abstract/introduction. A lighter final single-blind peer review (anonymity of reviewers is preserved)

then accepts this full paper version, on the basis of whether the protocol has been followed rigorously and findings described appropriately. **Whether these findings are confirmatory of the hypotheses does not affect the outcome.** The final complete paper is published in PMLR.

1.2 Structure of the pre-registered proposal paper

We do not impose a strict structure that needs to be followed, but recommend proposal’s to contain: an abstract, introduction, background and related work, hypotheses and proposed method, experimental protocol. **Proposal papers are expected to be a maximum of 6 pages and may contain an unlimited amount of extra pages for references only. The proposal stage contains no supplementary material.**

Contrary to traditional papers that authors may be used to, proposals distinguish themselves through formulation of **rigorous hypotheses** and a **detailed experimental protocol**. There are many ways in which to formulate hypotheses and experimental protocols, but most importantly, the two should naturally go hand-in-hand. Authors may also want to include toy experiments to provide initial intuition for why a hypothesis may be reasonable.

A well-grounded hypothesis is complemented with an experimental protocol that is able to **gather evidence to test the hypothesis**. It should thus be **clearly stated what insight each respective experiment contributes**. There can be several aspects worth mentioning, relating to, but not limited to:

- Selected data, data sets, benchmarks,
- Chosen evaluation measures and metrics,
- Recent methods to compare and contrast,
- Ablation studies, and/or
- Hyper-parameters and their influence.

Crucially, authors should **motivate why investigating mentioned aspects is insightful and what support will be gathered through results**. In other words, arguments should not solely rely on reasoning akin to “our method is likely to beat the performance of x on dataset y if we tweak hyper-parameter z”, but outline why the investigation is interesting for the proposed method(s). Notably, a good experimental protocol will rigorously describe options, but not all options may later be necessary to arrive at sufficient conclusions. Instead, the protocol elaborates on what is meaningful to investigate, where a potentially non-exhaustive set will be used to arrive at insights to support the proposal’s hypotheses. During the review process, reviewers may request changes to the experimental protocol, as well as questioning/improving the hypotheses. See the next section for final deviations from the original protocol.

1.3 Structure of the final results paper

After acceptance of the pre-registered proposal, **the final paper is required to add experimental results and discussions, with no strict page limit. Importantly, the initial six pages are must not be modified**, with the exception of a minor addition of a summary of results at the end of the abstract and/or introduction. The unlimited amount of pages is to ensure that all results are properly documented and adequately explained. However, we encourage authors to stay concise, with a **recommended final length of 10-12 pages. Additional materials (e.g. videos, code, proofs) are permitted in the form of supplementary material in this stage**. We strongly encourage the contribution of public code in the second stage to promote reproducibility.

Ideally, the proposal paper should transition seamlessly to the final results paper. In that sense, the final full paper should follow up on the rigorously outlined experimental protocol, supplement it with collected results, and contain an ensuing discussion on what this evidence contributes towards the proposal’s formulated hypotheses. Similar to the first stage, we do not impose a strict set of sections, but strongly encourage authors to adopt sections that include: experimental results, discussion (w.r.t. earlier hypotheses), conclusion, and log of changes. The last section in particular is essential and different from standard papers. It is the only section that is formally required in the final paper as **“Changes and additions to the pre-registered proposal”**, if any modifications are made to the originally proposed protocol or method. This implies in particular, that if the original methods section is later complemented with additional methodology, these changes are only outlined in the changes and additions section in the later parts of end of the paper. The rationale here is to maintain and expose the thought process and thus also share valuable insights that were gained along the way.

Although the idea of a pre-registration process is to sketch out hypotheses and an experimental protocol as rigorously as possible, authors may find interesting alternative questions to investigate during the second stage. Whereas the main experimental protocol should be adhered to as closely as possible, we do not wish to hinder authors from investigating such additional meaningful directions. In this scenario, **additions or small changes are permitted, but need to be outlined and motivated rigorously in the changes and additions section** mentioned above. Similarly, if one of the earlier outlined experiments no longer makes sense due to contradictions in already-obtained results, this section serves the purpose to elaborate why not all of the experimental protocol has been followed from start to end. As noted earlier, the final light-reviewing stage will assess whether the proposed experiments have been rigorously followed and whether optional changes have been meaningfully supported in writing.

2 GENERAL FORMATTING INSTRUCTIONS

The accepted proposals for presentation at the conference are 6 pages, plus any additional pages needed for references. The second stage's full results papers are not limited in terms of pages and may further contain various forms of supplementary material. We recommend the total length to not exceed 10-12 pages.

Papers are in 2 columns with the overall line width of 6.75 inches (41 picas). Each column is 3.25 inches wide (19.5 picas). The space between the columns is .25 inches wide (1.5 picas). The left margin is 0.88 inches (5.28 picas). Use 10 point type with a vertical spacing of 11 points. Please use US Letter size paper instead of A4.

Paper title is 16 point, caps/lc, bold, centered between 2 horizontal rules. Top rule is 4 points thick and bottom rule is 1 point thick. Allow 1/4 inch space above and below title to rules.

Author descriptions are center-justified, initial caps. The lead author is to be listed first (left-most), and the Co-authors are set to follow. If up to three authors, use a single row of author descriptions, each one center-justified, and all set side by side; with more authors or unusually long names or institutions, use more rows.

Use one-half line space between paragraphs, with no indent.

3 FIRST LEVEL HEADINGS

First level headings are all caps, flush left, bold, and in point size 12. Use one line space before the first level heading and one-half line space after the first level heading.

3.1 Second Level Heading

Second level headings are initial caps, flush left, bold, and in point size 10. Use one line space before the second level heading and one-half line space after the second level heading.

3.1.1 Third Level Heading

Third level headings are flush left, initial caps, bold, and in point size 10. Use one line space before the third level heading and one-half line space after the third level heading.

Fourth Level Heading Fourth level headings must be flush left, initial caps, bold, and Roman type. Use one line space before the fourth level heading, and place the section text immediately after the heading with no line break, but an 11 point horizontal space.

3.2 Citations, Figure, References

3.2.1 Citations in Text

Citations within the text should include the author's last name and year, e.g., (Cheesman, 1985). Be sure that the sentence reads correctly if the citation is deleted: e.g., instead of "As described by (Cheesman, 1985), we first frobulate the widgets," write "As described by Cheesman (1985), we first frobulate the widgets."

The references listed at the end of the paper can follow any style as long as it is used consistently.

3.2.2 Footnotes

Indicate footnotes with a number¹ in the text. Use 8 point type for footnotes. Place the footnotes at the bottom of the column in which their markers appear, continuing to the next column if required. Precede the footnote section of a column with a 0.5 point horizontal rule 1 inch (6 picas) long.²

3.2.3 Figures

All artwork must be centered, neat, clean, and legible. All lines should be very dark for purposes of reproduction, and art work should not be hand-drawn. Figures may appear at the top of a column, at the top of a page spanning multiple columns, inline within a column, or with text wrapped around them, but the figure number and caption always appear immediately below the figure. Leave 2 line spaces between the figure and the caption. The figure caption is initial caps and each figure should be numbered consecutively.

Make sure that the figure caption does not get separated from the figure. Leave extra white space at the bottom of the page rather than splitting the figure and figure caption.

This figure intentionally left non-blank

Figure 1: Sample Figure Caption

3.2.4 Tables

All tables must be centered, neat, clean, and legible. Do not use hand-drawn tables. Table number and title always appear above the table. See Table 1.

Use one line space before the table title, one line space after the table title, and one line space after the table. The table

¹Sample of the first footnote.

²Sample of the second footnote.

title must be initial caps and each table numbered consecutively.

Table 1: Sample Table Title

PART	DESCRIPTION
Dendrite	Input terminal
Axon	Output terminal
Soma	Cell body (contains cell nucleus)

4 SUPPLEMENTARY MATERIAL

Inclusion of supplementary material in any form (no textual appendices, code or data uploads) is NOT allowed for pre-registered proposals. The reasoning is simple: the purpose of the proposal is to focus on ideas, hypotheses and rigorous protocols, for which supplementary material is not yet necessary.

Supplementary material is explicitly allowed and encouraged for the final results paper. If you need to include additional *textual* appendices (such as missing proofs, additional explanations, derivations etc.) during submission of the results paper, please include them in the same PDF file as the main paper. Non-textual supplementary material (such as code or videos) must be submitted in a separate ZIP file on OpenReview. As the final reviewing stage of the full results paper is single-blind (reviewers' identity remains anonymous), this has the further advantage that encouraged auxiliary artefacts, such as data, code, videos etc., can be uploaded and linked to easily.

The textual supplementary material must follow the same formatting instructions as in the main paper. The only difference is that it must be in a *single-column* format. Please see section A for further instructions regarding supplementary material.

5 SUBMISSION INSTRUCTIONS

To submit your paper to ContinualAI Unconference 2023, please follow these instructions.

1. Download `claiunconf2023.sty`, `fancyhdr.sty`, and `sample_paper.tex` provided in our starter pack. Please, do not modify the style files as this might result in a formatting violation.
2. Use `sample_paper.tex` as a starting point for your pre-registered proposal paper.
3. Begin your document with

```
\documentclass[twoside]{article}
\usepackage{claiunconf2023}
```

The `twoside` option for the class `article` allows the package `fancyhdr.sty` to include headings for even and odd numbered pages.

4. When you are ready to submit the proposal manuscript, compile the latex file to obtain the pdf file.
5. Check that the content of your proposal submission, *excluding* references, is limited to **6 pages**. The number of pages containing references alone is not limited.
6. Upload the proposal PDF file along to the OpenReview website.
7. Further information will be provided if the proposal is accepted for presentation at the conference, followed by instructions towards the final results paper for the second stage review and later proceedings.

5.1 Camera-ready Papers

If your papers are accepted, you will need to submit the camera-ready version for dissemination at the conference. Please make sure that you follow these instructions:

1. Change the beginning of your document to

```
\documentclass[twoside]{article}
\usepackage[accepted]{claiunconf2023}
```

The option `accepted` for the package `claiunconf2023.sty` will write a copyright notice at the end of the first column of the first page. This option will also print headings for the paper. For the *even* pages, the title of the paper will be used as heading and for *odd* pages the author names will be used as heading. If the title of the paper is too long or the number of authors is too large, the style will print a warning message as heading. If this happens additional commands can be used to place as headings shorter versions of the title and the author names. This is explained in the next point.

2. If you get warning messages as described above, then immediately after `\begin{document}`, write

```
\runningtitle{Provide here an
alternative shorter version of the
title of your paper}
\runningauthor{Provide here the
surnames of the authors of your
paper, all separated by commas}
```

Note that the text that appears as argument in `\runningtitle` will be printed as a heading in the *even* pages. The text that appears as argument in `\runningauthor` will be printed as a heading in the *odd* pages. If even the author surnames do not fit, it is acceptable to give a subset of author names followed by “et al.”

3. **The camera-ready versions of the proposal papers are 7 pages**, plus any additional pages needed for references. The camera ready thus contains an extra page that allows authors to include feedback from the reviewing process, such as suggested additions to the experimental protocol.
4. Please, do not change the layout given by the above instructions and by the style file.

Acknowledgements

All acknowledgments go at the end of the paper, including thanks to reviewers who gave useful comments, to colleagues who contributed to the ideas, and to funding agencies and corporate sponsors that provided financial support. **Like references, acknowledgements do not contribute to the page limit.** To preserve the anonymity, please include acknowledgments *only* in the camera-ready papers.

References

References follow the acknowledgements. Use an unnumbered third level heading for the references section. Please use the same font size for references as for the body of the paper—**remember that references do not count against your page length total.**

References

- J. Alspector, B. Gupta, and R. B. Allen (1989). Performance of a stochastic learning microchip. In D. S. Touretzky (ed.), *Advances in Neural Information Processing Systems 1*, 748–760. San Mateo, Calif.: Morgan Kaufmann.
- F. Rosenblatt (1962). *Principles of Neurodynamics*. Washington, D.C.: Spartan Books.
- G. Tesauro (1989). Neurogammon wins computer Olympiad. *Neural Computation* **1**(3):321–323.

A FORMATTING INSTRUCTIONS APPENDICES

The textual supplementary material should be included in the **same PDF file** as the main paper. **Note that any supplementary material is NOT allowed for the proposal paper, but is encouraged to be included in the final results paper.**