Near Complete Formal Semantics of X86-64

Abstract

This document is intended to serve as a sample for submissions to the 23rd International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2018. It provides guidelines that authors should follow when submitting papers to the conference.

1. Introduction

This document provides instructions for submitting papers to the 23rd International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2018. In an effort to respect the efforts of reviewers and in the interest of fairness to all prospective authors, we request that all submissions to ASPLOS 2018 follow the formatting and submission rules detailed below. Submissions that violate these instructions may not be reviewd, at the discretion of the program chair, in order to maintain a review process that is fair to all potential authors.

An example submission (formatted using the ASPLOS'18 submission format) that contains the submission and formatting guidelines can be downloaded from here: Sample PDF. The content of this document mirrors that of the submission instructions that appear on this website, where the paper submission site will be linked online shortly.

All questions regarding paper formatting and submission should be directed to the program chair.

Highlights (note the following) :

- Paper must be submitted in printable PDF format.
- Text must be in a minimum 10pt (**not** 9pt) font.
- Papers must be submitted in printable PDF format and should contain a maximum of 11 pages of single-spaced two-column text, including any appendixes, but not including references.
- No page limit for references.
- Each reference must specify *all* authors (no *et al.*).
- Authors may optionally suggest reviewers.
- Authors of *all* accepted papers will be required to give a lightning presentation (about 90s) and a poster in addition to the regular conference talk.
- Proceedings will appear in the ACM digital library up to two weeks before the conference.

Paper evaluation objectives :

The committee will make every effort to judge each submitted paper on its own merits. There will be no target acceptance rate. We expect to accept a wide range of papers with appropriate expectations for evaluation — while papers that build on significant past work with strong evaluations are valuable,

papers that open new areas with less rigorous evaluation are equally welcome and especially encouraged. Given the wide range of topics covered by ASPLOS, every effort will be made to find expert reviewers, including providing the ability for authors' to suggest additional reviewers.

2. Paper Preparation Instructions

2.1. Paper Formatting

Papers must be submitted in printable PDF format and should contain a **maximum of 11 pages** of single-spaced two-column text, including any appendixes, but **not including references**. You may include any number of pages for references, but see below for more instructions. If you are using LATEX [1] to typeset your paper, then we suggest that you use the template here: LATEX Template. (This document was prepared with that template.) If you use a different software package to typeset your paper, then please adhere to the guidelines given in Table 1.1

Field	Value
File format	PDF
Page limit	11 pages, not including
	references
Paper size	US Letter 8.5in × 11in
Top margin	1in
Bottom margin	1in
Left margin	0.75in
Right margin	0.75in
Body	2-column, single-spaced
Separation between columns	0.25in
Body font	10pt
Abstract font	10pt, italicized
Section heading font	12pt, bold
Subsection heading font	10pt, bold
Caption font	9pt, bold
References	8pt, no page limit, list
	all authors' names

Table 1: Formatting guidelines for submission.

Please ensure that you include page numbers with your submission. This makes it easier for the reviewers to refer to different parts of your paper when they provide comments.

¹One exception is that authors may use the SIGPLAN style/class file here, but only with the 10pt body font option (9pt will be rejected) and modified as needed for the requirements of the references section below. This is marginally different from the specified template, but will be accepted due to its widespread use.

Please ensure that your submission has a banner at the top of the title page, similar to this one, which contains the submission number and the notice of confidentiality. If using the template, just replace XXX with your submission number.

2.2. Content

Author List. Reviewing will be **double blind**; therefore, please **do not include any author names on any submitted documents except in the space provided on the submission form**. You must also ensure that the metadata included in the PDF does not give away the authors. If you are improving upon your prior work, refer to your prior work in the third person and include a full citation for the work in the bibliography. For example, if you are building on *your own* prior work in the papers [2, 3, 4], you would say something like: "While the authors of [2, 3, 4] did X, Y, and Z, this paper additionally does W, and is therefore much better." Do NOT omit or anonymize references for blind review. There is one exception to this for your own prior work that appeared in IEEE CAL, workshops without archived proceedings, etc. as discussed later in this document.

Figures and Tables. Ensure that the figures and tables are legible. Please also ensure that you refer to your figures in the main text. Many reviewers print the papers in gray-scale. Therefore, if you use colors for your figures, ensure that the different colors are highly distinguishable in gray-scale.

References. There is no length limit for references. Each reference must explicitly list all authors of the paper. Papers not meeting this requirement will be rejected. Authors of NSF proposals should be familiar with this requirement. Knowing all authors of related work will help find the best reviewers. Since there is no length limit for the number of pages used for references, there is no need to save space here.

3. Paper Submission Instructions

3.1. Declaring Authors

Declare all the authors of the paper up front. Addition/removal of authors once the paper is accepted will have to be approved by the program chair, since it potentially undermines the goal of eliminating conflicts for reviewer assignment.

3.2. Areas and Topics

ASPLOS emphasizes multidisciplinary research. Submissions should ideally emphasize synergy of two or more ASPLOS areas: architecture, programming languages, operating systems, and related areas (broadly interpreted). Authors should indicate these areas on the submission form as well as specific topics covered by the paper for optimal reviewer match. If you are unsure whether your paper falls within the scope of ASPLOS, please check with the program chair – ASPLOS is a broad, multidisciplinary conference and encourages new topics.

3.3. Declaring Conflicts of Interest

Authors must register all their conflicts on the paper submission site. Conflicts are needed to ensure appropriate assignment of reviewers. If a paper is found to have an undeclared conflict that causes a problem OR if a paper is found to declare false conflicts in order to abuse or "game" the review system, the paper may be rejected.

Please declare a conflict of interest (COI) with the following people for any author of your paper:

- 1. Your Ph.D. advisor(s), post-doctoral advisor(s), Ph.D. students, and post-doctoral advisees, forever.
- 2. Family relations by blood or marriage, or their equivalent, forever (if they might be potential reviewers).
- 3. People with whom you have collaborated in the last five years, including
 - co-authors of accepted/rejected/pending papers.
 - co-PIs on accepted/rejected/pending grant proposals.
 - funders (decision-makers) of your research grants, and researchers whom you fund.
- 4. People (including students) who shared your primary institution(s) in the last five years.

"Service" collaborations such as co-authoring a report for a professional organization, serving on a program committee, or co-presenting tutorials, do not themselves create a conflict of interest. Co-authoring a paper that is a compendium of various projects with no true collaboration among the projects does not constitute a conflict among the authors of the different projects.

On the other hand, there may be others not covered by the above with whom you believe a COI exists, for example, close personal friends. Please report such COIs; however, you may be asked to justify them. Please be reasonable. For example, you cannot declare a COI with a reviewer just because that reviewer works on topics similar to or related to those in your paper. The PC Chair may contact co-authors to explain a COI whose origin is unclear.

We hope to draw most reviewers from the PC and the ERC, but others from the community may also write reviews. Please declare all your conflicts (not just restricted to the PC and ERC). When in doubt, contact the program chair.

3.4. Optional Reviewer Suggestions

Authors may optionally mark (non-conflicted) PC and ERC members that they believe could provide expert reviews for their submission. If authors believe there is insufficient expertise on the PC and ERC for the topic of their paper, they may suggest alternate reviewers. The program chair will use the authors' input at her discretion. We provide this opportunity for input mostly for papers on non-traditional and emerging topics.

3.5. Concurrent Submissions and Workshops

By submitting a manuscript to ASPLOS'18, the authors guarantee that the manuscript has not been previously published or accepted for publication in a substantially similar form in any conference, journal, or workshop. The only exceptions are (1) workshops without archived proceedings such as in the ACM digital library (or where the authors chose not to have their paper appear in the archived proceedings), or (2) venues, such as IEEE CAL, where there is an explicit policy that such publication does not preclude longer conference submissions. These are not considered prior publications. Technical reports and papers posted on public social media sites, Web pages, or online repositories, such as arxiv.org, are not considered prior publications either. In such exceptional cases, the submitted manuscript may ignore the above work to preserve author anonymity. This information must, however, be provided on the submission form - the program chair(s) will make this information available to reviewers if it becomes necessary to ensure a fair review. (This policy will be explicitly conveyed to the reviewers as well.) The authors also guarantee that no paper that contains significant overlap with the contributions of the submitted paper will be under review for any other conference, journal, or workshop during the ASPLOS'18 review period. Violation of any of these conditions will lead to rejection. As always, if you are in doubt, it is best to contact the program chair(s). Finally, we also note that the ACM Plagiarism Policy (http://www.acm.org/publications/policies/plagiarism_policy) covers a range of ethical issues concerning the misrepresentation of other works or one's own work.

4. Early Access in the Digital Library

The ASPLOS'18 proceedings will be freely available via the ACM Digital Library for up to two weeks before and up to a month after the conference. Authors must consider any implications of this early disclosure of their work before submitting their papers.

5. Acknowledgements

This document is modified from the ASPLOS'17 submission guide.

References

- Leslie Lamport. <u>ETEX</u>: A Document Preparation System. Addison-Wesley, Reading, Massachusetts, 2nd edition, 1994.
- [2] Firstname1 Lastname1 and Firstname2 Lastname2. A very nice paper to cite. In *Proceedings of the 33rd Annual ACM SIGPLAN Conference on Programming Language Design and Implementation*, 2012.
- [3] Firstname1 Lastname1, Firstname2 Lastname2, and Firstname3 Lastname3. Another very nice paper to cite. In Proceedings of the 22nd ACM Symposium on Operating Systems Principles, 2011.
- [4] Firstname1 Lastname1, Firstname2 Lastname2, Firstname3 Lastname3, Firstname4 Lastname4, and Firstname5 Lastname5. Yet another very nice paper to cite, with many author names all spelled out. In Proceedings of the 38th Annual International Symposium on Computer Architecture, 2011.