

Call for Papers: 12th Workshop on Programming Languages and Operating Systems (PLOS 2023)

<http://plos-workshop.org/2023/>

October 23, 2023, Koblenz, Germany
Co-organized with SOSP 2023

Important Dates

Paper submission deadline:	August 4, 2023
Notification of acceptance:	September 4, 2023
Final papers due:	September 29, 2023
Workshop:	October 23, 2023

Overview

Historically, operating system and programming language development went hand-in-hand. Challenges in one area were often approached using ideas/techniques developed in the other, and advances in one area enabled new capabilities in the other. Today, although the systems community at large retains an iron grip on C, modern programming language ideas continue to spark innovations in OS design and construction. Conversely, the systems field continues to provide a wealth of challenging problems and practical results that should lead to advances in programming languages, software designs, and idioms.

This workshop will bring together researchers and developers from the programming language and operating system domains to discuss recent work at the intersection of these fields. It will be a platform for discussing new visions, challenges, experiences, problems, and solutions arising from the application of advanced programming and software engineering concepts to operating systems construction, and vice versa.

Suggested paper topics include, but are not restricted to:

- domain-specific and type-safe languages for the OS;
- the design of language-specific unikernels;
- language-based approaches to crosscutting system concerns, such as security and run-time performance;
- PL support for system verification, testing, and debugging;
- synthesis of OS code;
- static/dynamic OS configuration and specialization;
- PL support for OS integration of modern hardware (NVM, HBM, FPGAs, accelerators, RDMA, etc.);
- the use of OS abstractions and techniques in language runtimes;
- verification and static analysis of OS components;
- critical evaluations of new programming language ideas in support of OS construction; and
- experience reports on applying new language techniques in commercial OS settings.

Agenda

The workshop will be a highly interactive event with an agenda designed to promote focused and lively discussions. Part of the workshop program will be based on paper presentations. PLOS welcomes research, experience, and position papers; papers describing industrial experience are particularly encouraged. The

set of accepted papers will be made available to registered attendees in advance of the workshop. Participants should come to the workshop prepared with questions and comments.

Submission Guidelines

All papers must be written in English and should be formatted in the two-column ACM article style (<https://www.acm.org/publications/proceedings-template>, using the options `sigplan`, `anonymous`, `10pt`). The CCS Concepts, Keywords, and ACM Reference Format sections are not required in submissions. Submissions are *double-blind*: author names and affiliations should not be included.

Submissions must not be more than six (6) pages in length, using 10-point font. The bibliography does not count towards the page limit. The page limit will be strictly enforced. They will be reviewed by the workshop program committee and designated external reviewers. Papers will be evaluated based on technical quality, originality, relevance, and presentation. The submission website is: <https://plos23.hotcrp.com/>.

By default, accepted papers will be published electronically in the ACM Digital Library. The authors of accepted papers to be included in the ACM Digital Library will be required to sign ACM copyright release forms. *The publication of a paper in the PLOS workshop proceedings is not intended to replace future conference publication.*

Program Committee

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David Cock, ETH Zurich
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