

Call for Papers: 9th Workshop on Programming Languages and Operating Systems

PLOS 2017

October 28, 2017 at SOSP '17

<http://ess.cs.tu-dortmund.de/workshops/plos/2017/>

Shanghai, China

Paper submission deadline: August 18, 2017
Notification of acceptance: September 18, 2017
Final papers due: October 14, 2017

Overview

Historically, operating system development and programming language development went hand-in-hand. Challenges in one area were often approached using ideas or 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:

- critical evaluations of new programming language ideas in support of OS construction,
- domain-specific languages for operating systems,
- type-safe languages for operating systems,
- object-oriented and component-based operating systems,
- language-based approaches to crosscutting system concerns, such as security and run-time performance,
- synthesis of OS code,
- language support for system verification, testing, and debugging,
- static/dynamic configuration of operating systems,
- static/dynamic specialization within operating systems,
- the use of OS abstractions and techniques in language runtimes,
- experience reports on applying new language techniques in commercial OS settings,
- the design of language-specific unikernels.

Agenda

The workshop will be a highly interactive event with an agenda designed to promote focused and lively discussions.

Part of the workshop will be based on presentations of papers—we welcome 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. There will be the possibility of demos associated with the accepted papers.

Submission Guidelines

PLOS welcomes research, experience, and position papers; papers describing industrial experience are particularly encouraged. All papers must be written in English and should be formatted according to the two-column ACM SIGPLAN proceedings format (<http://www.sigplan.org/Resources/Author/>, using the options sigplan,10pt). The CCS Concepts, Keywords, and ACM Reference Format sections are not required in submissions. Submissions are *single blind*: author names and affiliations should 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, and shorter papers are encouraged. Papers must be submitted in PDF format via the workshop Web site. 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.

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

Heming Cui, The University of Hong Kong
Alastair Donaldson, Imperial College
Eric Eide, University of Utah
Julia Lawall, Inria (Chair)
Nicolas Palix, University of Grenoble
Wolfgang Schröder-Preikschat, Univ. Erlangen-Nuremburg
Zhong Shao, Yale University
Mike Swift, University of Wisconsin
David Walker, Princeton University
Andrzej Wasowski, IT University

Organizing Committee

Chris Hawblitzel, Microsoft Research
Gilles Muller, Inria/LIP6
Olaf Spinczyk, Technische Universität Dortmund