JOURNAL OF SYSTEMS AND SOFTWARE

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DESCRIPTION

The *Journal of Systems and Software* publishes papers covering all aspects of software engineering and related hardware-software-systems issues. All articles should provide evidence to support their claims, e.g. through empirical studies, simulation, formal proofs or other types of validation. Topics of interest include, but are not limited to:

Methods and tools for software requirements, design, architecture, verification and validation, testing, maintenance and evolution Agile, model-driven, service-oriented, open source and global software development Approaches for mobile, multiprocessing, real-time, distributed, cloud-based, dependable and virtualized systems Human factors and management concerns of software development Artificial Intelligence, data analytics and big data applied in software engineering Metrics and evaluation of software development resources DevOps, continuous integration, build and test automation Business and economic aspects of software development processes Software Engineering education

The journal welcomes reports of practical experience for all of these topics, as well as replication studies and studies with negative results. The journal appreciates the submission of systematic literature reviews, mapping studies and meta-analyses. However, these should report interesting and important results, rather than merely providing statistics on publication year, venue etc. In addition to regular papers, JSS features two special tracks (In Practice, New Ideas and Trends Papers), as well as special issues."

*In Practice* is exclusively focused on work that increases knowledge transfer from industry to research. It accepts: (1) experience reports, showing what actually happens in practice (contrasted to theory), illustrating the challenges (and pain) that practitioners face, detailing how research results fair in realistic settings, and presenting lessons learned; (2) problem descriptions with significant details on the context, underlying causes and explicit symptoms of the problem, the technical and organizational impact of the problem, as well as relevant research questions for researchers to investigate, and finally (3) tool-focused papers discussing the usability, scalability, engineering, and other challenges faced when implementing a research concept. Submissions to this track should include at least one co-author from industry and be within scope of the journal's above topics of interest. In addition, submissions will be evaluated through industry-appropriate criteria for their merit in reporting useful industrial experience; not in terms of academic novelty of research results.

*New Ideas and Trends Papers*

New ideas, especially those related to new research trends, emerge quickly. To accommodate timely dissemination thereof, JSS introduces the New Ideas and Trends Paper (NITP). NITPs should focus on the systems/software engineering aspects of new emerging areas, including: the internet of things,
big data, cloud computing, software ecosystems, cyber-physical systems, green/sustainable systems, continuous software engineering, crowdsourcing, and the like. We distinguish two types of NITPs: A short paper that discusses a single contribution to a specific new trend or a new idea. A long paper that provides a survey of a specific trend, as well as a (possibly speculative) outline of a solution. We anticipate revisiting specific new trends periodically, for instance through reflection or progress reports.

New Ideas and Trend Papers warrant speedy publication.

Special Issues proposals
To submit a proposal for a special issue, please contact the Special Issues Editor Prof. W.K. Chan

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In addition to regular papers, JSS features two special tracks (In Practice, New Ideas and Trends Papers), as well as special issues.

**In Practice**

"In Practice" is exclusively focused on work that increases knowledge transfer from industry to research. It accepts: (1) experience reports, showing what actually happens in practice (contrasted to theory), illustrating the challenges (and pain) that practitioners face, detailing how research results fair in realistic settings, and presenting lessons learned; (2) problem descriptions with significant details on the context, underlying causes and explicit symptoms of the problem, the technical and organizational impact of the problem, as well as relevant research questions for researchers to investigate. Submissions to this track should include at least one co-author from industry and be within scope of the journal's above topics of interest. In addition, submissions will be evaluated through industry-appropriate criteria for their merit in reporting useful industrial experience; not in terms of academic novelty of research results.

**New Trends and Ideas Papers**

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submit an extended version, one that does contain a proper validation of the ideas put forth, at a
later stage. A long paper that provides a survey of a specific trend, as well as a (possibly speculative)
online of a solution.

We anticipate revisiting specific new trends periodically, for instance through reflection or progress
reports.

New Ideas and Trend Papers warrant speedy publication. Therefore, only one round of major revision
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