#### Call for papers

## Invited Talks (NEW!)

- Philippa Gardner, Imperial College: Testing and Verification for JavaScript (joint with LOPSTR)
- Jorge Navas, SRI International:
- Constrained Horn Clauses for Verification (joint with LOPSTR)Chung-Chieh Shan, University of Indiana:
- Calculating Distributions

#### Scope

The PPDP 2018 symposium brings together researchers from the declarative programming communities, including those working in the functional, logic, answer-set, and constraint handling programming paradigms. The goal is to stimulate research in the use of logical formalisms and methods for analyzing, performing, specifying, and reasoning about computations, including mechanisms for concurrency, security, static analysis, and verification.

Submissions are invited on all topics related to declaractive programming, from principles to practice, from foundations to applications. Topics of interest include, but are not limited to

- Language Design: domain-specific languages; interoperability; concurrency, parallelism, and distribution; modules; probabilistic languages; reactive languages; database languages; knowledge representation languages; languages with objects; language extensions for tabulation; metaprogramming.
- Implementations: abstract machines; interpreters; compilation; compiletime and run-time optimization; memory management.
- Foundations: types; logical frameworks; monads and effects; semantics.
- Analysis and Transformation: partial evaluation; abstract interpretation; control flow; data flow; information flow; termination analysis; resource analysis; type inference and type checking; verification; validation; debugging; testing.
- Tools and Applications: programming and proof environments; verification tools; case studies in proof assistants or interactive theorem provers; certification; novel applications of declarative programming inside and outside of CS; declarative programming pearls; practical experience reports and industrial application; education.

The PC chair will be happy to advise on the appropriateness of a topic.

PPDP will be co-located with the 28th Int'l Symp. on Logic-Based Program Synthesis and Transformation (LOPSTR 2018).

# Submission Categories

Submissions can be made in three categories: regular Research Papers, System Descriptions, and Experience Reports.

Submissions of Research Papers must present original research which is unpublished and not submitted elsewhere. They must not exceed 12 pages ACM style 2-column (including figures, but excluding bibliography). Work that already appeared in unpublished or informally published workshop proceedings may be submitted (please contact the PC chair in case of questions). Research papers will be judged on originality, significance, correctness, clarity, and readability.

Submission of System Descriptions must describe a working system whose description has not been published or submitted elsewhere. They must not exceed 10 pages and should contain a link to a working system. System Descriptions must be marked as such at the time of submission and will be judged on originality, significance, usefulness, clarity, and readability.

Submissions of Experience Reports are meant to help create a body of published, refereed, citable evidence where declarative programming such as functional, logic, answer-set, constraint programming, etc., is used in practice. They must not exceed 5 pages **including references**. Experience Reports must be marked as such at the time of submission and need not report original research results. They will be judged on significance, usefulness, clarity, and readability.

Possible topics for an Experience Report include, but are not limited to:

insights gained from real-world projects using declarative programming comparison of declarative programming with conventional programming in the context of an industrial project or a university curriculum curricular issues encountered when using declarative programming in education real-world constraints that created special challenges for an implementation of a declarative language or for declarative programming in general novel use of declarative programming in the classroom programming pearl that illustrates a nifty new data structure or programming technique.

Supplementary material may be provided in a clearly marked appendix beyond the above-mentioned page limits. Reviewers are not required to study any material beyond the respective page limit.

## Format of a submission

For each paper category, you must use the most recent version of the "Current ACM Master Template" which is available at https://www.acm.org/publications/proceedings-template. The most recent version at the time of writing is 1.48. You must use the LaTeX sigconf proceedings template as the conference organizers are unable to process final submissions in other formats. In case of problems with the templates, contact ACM's TeX support team at Aptara.

Authors should note ACM's statement on author's rights which apply to final papers. Submitted papers should meet the requirements of ACM's plagiarism policy.

# **Requirements for publication**

At least one author of each accepted submission will be expected to attend and present the work at the conference. The pc chair may retract a paper that is not presented. The pc chair may also retract a paper if complaints about the paper's correctness are raised which cannot be resolved by the final paper deadline.

## Important dates

- 23.04.2018 paper submission
- 14.06.2018 rebuttal period (48 hours)
- 25.06.2018 notification
- 16.07.2018 final papers
- 03.09.2018 conference starts