Call for Papers

ICFP 2006: International Conference on Functional Programming

Portland, Oregon, 18–20 September 2006

Scope: ICFP 2006 seeks original papers on the art and science of functional programming. Submissions are invited on all topics ranging from principles to practice, from foundations to features, from abstraction to application. The scope includes all languages that encourage functional programming, including both purely applicative and imperative languages, as well as languages with objects and concurrency. Particular topics of interest include:

- **Applications and domain-specific languages**: Systems programming, scientific and numerical computing, symbolic computing and artificial intelligence, databases, graphical user interfaces, multimedia programming, application scripting, system administration, distributed-systems and web programming, XML processing, security.
- **Foundations**: Formal semantics, lambda calculus, type theory, monads, continuations, control, state, effects.
- **Design**: Algorithms and data structures, modules and type systems, concurrency and distribution, components and composition, relations to object-oriented and logic programming.
- **Implementation**: Abstract machines, compile-time and run-time optimization, just-in-time compilers, memory management. Interfaces to foreign functions, services, components and low-level machine resources.
- **Transformation and analysis**: Abstract interpretation, partial evaluation, program transformation.
- **Software-development techniques for functional programming**: Design patterns, specification, verification, validation, debugging, test generation, tracing and profiling.
- **Practice and experience**: Functional programming in education and industry.
- **Functional pearls**: Elegant, instructive examples of functional programming.

Papers in the last two categories need not necessarily report original research results; they may instead, for example, report practical experience that will be useful to others, re-usable programming idioms, or elegant new ways of approaching a problem.

Submission guidelines: Authors should submit an abstract (300 words max) together with a full paper by the submission deadline. Submissions will be carried out electronically via the Web, at http://www.easychair.org/ICFP2006/. Improved versions of a paper may be submitted at any point before the submission deadline using the same web interface.

Each paper should explain its contributions in both general and technical terms, clearly identifying what has been accomplished, explaining why it is significant, and comparing it with previous work. Authors should strive to make the technical content of their papers understandable to a broad audience.

Submitted papers must adhere to SIGPLAN’s republication policy. Authors of accepted papers will be invited to submit journal versions for a special issue of JFP.

Formatting instructions: Papers must be printable on US Letter sized paper and be submitted in either PDF format or as PostScript documents that are interpretable by Ghostscript. Individuals for which this requirement is a hardship should contact the program chair at least one week before the deadline.

Submissions should be no more than 12 pages (including bibliography) in standard ACM conference format: two columns, nine-point font on a ten-point baseline, with pages 20pc (3.33in) wide and 54pc (9in) tall, with a column gutter of 2pc (0.33in). A LaTeX class file is available from the SIGPLAN Author Information page (http://www.acm.org/sigs/sigplan/authorInformation.htm). Authors wishing to supply additional material to the reviewers beyond the page limit can do so in clearly marked appendices, on the understanding that reviewers are not required to read the appendices. You need not include categories, keywords, etc. in the submission, though you are welcome to do so.

Submissions that do not meet these guidelines will not be considered. The submission deadline and length limitations are firm.

Author response: Authors will be given a 48-hour period (23:00 17 May to 23:00 19 May 2004 Apia, Samoa time) to read and respond to the reviews for their papers before the PC meeting. See the conference web site for more details.

Special Issue of JFP: The top submitted papers, as determined by the program committee, will be invited to submit journal versions for a special issue of JFP.