Call for Papers

ICFP 2003: International Conference on Functional Programming

Uppsala, Sweden, 25–29 August 2003

Associated with PLI 2003: Colloquium on Principles, Logics and Implementation of High-Level Programming Languages

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Important Dates

Submission ..... 2300 UTC 29 March 2003
Notification ..... 19 May 2003
Final papers due ..... 16 June 2003

Web Sites

Submission site:
`http://www.cc.gatech.edu/icfp03/submit`

ICFP 2003:
`http://www-users.cs.york.ac.uk/~colin/icfp2003.html`

PLI 2003:
`http://www.it.uu.se/pli03/`

Scope: ICFP 2003 seeks original papers on the full spectrum of the art, science, and practice of functional programming. The conference invites submissions on all topics ranging from principles to practice, from foundations to features, and from abstraction to application. The scope covers all languages that encourage programming with functions, including both purely applicative and imperative languages, as well as languages that support objects and concurrency. Topics of interest include, but are not limited to, the following:

- *Foundations:* Formal semantics, λ 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, multiparadigm 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, theorem proving, specification and verification.
- *Software development techniques for functional programming:* Design patterns, specification, verification and validation, debugging, test generation, tracing and profiling.
- *Applications and domain-specific languages:* Systems programming, scientific and numerical computing, symbolic computing and artificial intelligence, systems programming, databases, graphical user interfaces, multimedia programming, application scripting, system administration, distributed-systems construction, web programming.
- *Practice and experience:* Functional programming in education and industry, ramifications on other paradigms and computing disciplines.
- *Functional pearls:* Elegant, instructive examples of functional programming.

Papers in the latter three 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. The key criterion for such a paper is that it makes a contribution from which other practitioners can benefit. It is not enough simply to describe a program!

Submission guidelines: Authors should submit a 100–200 word abstract and a *full paper* by 23:00 Universal Coordinated Time on Saturday, 29 March, 2003. Submissions should be *no more than 12 pages* (including bibliography and appendices) in standard ACM conference format: two columns, nine point font on ten point baseline, page 20pc (3.33in) wide and 54pc (9in) tall with a column gutter of 2pc (0.33in). Suitable style files for Latex, Word, and Word Perfect can be found on the submission Web site.

Authors wishing to supply additional material to the reviewers beyond the 12-page limit can do so in clearly marked appendices, on the understanding that reviewers are not required to read the appendices. Submissions that do not meet these guidelines will not be considered. The submission deadline and length above are *firm*.

Submissions will be carried out electronically via the Web, at the URL given in the left column. Papers must be submitted in PDF format, or as PostScript documents that are interpretable by Ghostscript, and they must be printable on US Letter sized paper. Individuals for which this requirement is a hardship should contact the program chair at least one week before the deadline.

Submitted papers must have content that has not previously been published in other conferences or refereed venues; simultaneous submission to other conferences or refereed venues is unacceptable. Each paper should explain its contributions in both general and technical terms, clearly identifying what has been accomplished, saying 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.

Authors of accepted papers will be required to sign the ACM copyright form. Proceedings will be published by ACM Press.