

CALL FOR PAPERS

Journal of Functional Programming

Special Issue on Functional Programming and Computational Complexity

A special issue of the *Journal of Functional Programming* will be devoted to functional programming and computational complexity. The submission deadline is 1st November 1997.

Techniques and models for understanding extensional properties of functional programs are quite well developed. Recently, more attention has been paid to intensional aspects of functional programs, but to date little work has been done on understanding their complexity-theoretic properties, such as usage of time and space resources. However, preliminary work has started in this direction. The DIMACS Workshop on Computational Complexity and Programming Languages was held at the DIMACS Center in July 1996 (more details may be found at <http://dimacs.rutgers.edu/Workshops/Programming>.) Inspired in part by the success of this workshop, this special issue will feature papers which explore complexity aspects of functional programming. Topics of interest include, but are not limited to

- cost models for functional languages
- applications of intensional semantics (including game semantics)
- reasoning about complexity of higher-order procedures
- designing algorithms and data structures for efficient functional computation
- complexity analysis of lazy programs
- logics and calculi which capture complexity classes
- complexity properties of evaluation techniques (e.g. partial evaluation)
- models of computation for functional programs

Papers should present material with a sound theoretical foundation. Of particular interest are papers which present general models for reasoning about complexity in a functional setting.

Submission of PostScript by email is encouraged, but hard copies are also welcome. All submissions for the special issue on functional programming and computational complexity should be sent to one of the Guest Editors (see address below). Submissions should arrive by 1 November 1997. For other submission details, please consult an issue of the *Journal of Functional Programming* or see the Journal's web pages at <http://www.dcs.gla.ac.uk/jfp/>.

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