

*Special issue on*

## *Semantics, Applications, and Implementation of Program Generation*

### CALL FOR PAPERS

Program generation has the prospect of being an integral part of a wide range of software development processes. Recent studies investigate different aspects of program generation systems, including their semantics, their applications, and their implementation. Existing theories and systems address both high-level (source) language and low-level (machine) language generation. A number of programming languages now support program generation and manipulation, with different goals, implementation techniques, and targeted at different applications. In this context, a PLI workshop dedicated to this theme (SAIG'00) was held in Montreal in September 2000. Following on from this workshop, a special issue of the *Journal of Functional Programming* will be devoted to the same theme.

Full-length, archival-quality submissions are solicited on topics including both theoretical and practical models and tools for building program generation systems. Examples include:

- Semantics, type systems, and implementations for multi-stage languages.
- Run-time specialization systems, e.g. compilers, operating systems.
- High-level program generation (applications, foundations, environments).
- Symbolic computation, linking and explicit substitution, in-lining and macros.

Reports on applications of these techniques to real-world problems are especially encouraged, as are submissions that relate ideas and concepts from several of these topics, or bridge the gap between theory and practice.

Contributors to SAIG'00 are encouraged to submit, but submission is open to everyone. Papers will be reviewed as regular JFP submissions, and acceptance in the special issue will be based on relevance to the theme. The special issue also welcomes high-quality survey and position papers that would benefit a wide audience. Accepted papers exceeding the space restrictions will be published as regular JFP papers.

Submissions should be sent to the guest editor (address below), with a copy to Nasreen Ahmad ([nasreen@dcs.gla.ac.uk](mailto:nasreen@dcs.gla.ac.uk)). Submitted articles should be sent in postscript format, preferably gzipped and uuencoded. In addition, please send, as plain text, title, abstract, and contact information. The submission deadline is 1st February 2001. For other submission details, please consult an issue of the *Journal of Functional Programming* or see the Journal's web page at <http://www.dcs.gla.ac.uk/jfp/>.

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