

Table of Contents

Paradigm Integration

Narrowing the Narrowing Space	1
<i>Sergio Antoy and Zena M. Ariola</i>	
An Object Calculus with Algebraic Rewriting	17
<i>Adriana Compagnoni and Maribel Fernández</i>	
Inheritance and Selective Method Dispatching in Concurrent Haskell	33
<i>José E. Gallardo, Francisco Gutiérrez and Blas C. Ruiz</i>	

Language Constructs

Overriding Operators in a Mixin-Based Framework	47
<i>Davide Ancona and Elena Zucca</i>	
Resolution for Logic Programming with Universal Quantifiers	63
<i>Antony F. Bowers, Patricia M. Hill and Francisco Ibañez</i>	
A Declarative Approach to Concurrent Programming	79
<i>Steve Gregory</i>	

Transformation

Transformation of Divide & Conquer to Nested Parallel Loops	95
<i>Christoph A. Herrmann and Christian Lengauer</i>	
Transforming Lazy Functions Using Compartment Properties	111
<i>Ross Paterson</i>	
Transformations for Efficient Evaluations in Functional Programming	127
<i>Salvador Lucas</i>	

Program Analysis

Inline Expansion: <i>When and How?</i>	143
<i>Manuel Serrano</i>	
Higher-Order Value Flow Graphs	159
<i>Christian Mossin</i>	
Intuitionistic Implication in Abstract Interpretation	175
<i>Roberto Giacobazzi and Francesca Scozzari</i>	

Compilation

An Open-Ended Finite Domain Constraint Solver	191
<i>Mats Carlsson, Greger Ottosson, Björn Carlson</i>	
Semantics and Compilation of Recursive Sequential Streams in λ /2	207
<i>Jean-Louis Giavitto, Dominique De Vito and Olivier Michel</i>	
Implementation of Term Rewritings with the Evaluation Strategy	225
<i>Kazuhiro Ogata and Kokichi Futatsugi</i>	
Reflections on Reflections	241
<i>Gilles Barthe, John Hatcliff and Morten Heine Sørensen</i>	

Evaluation

Evaluation under Lambda Abstraction	259
<i>Hongwei Xi</i>	
Selective Recomputation for Handling Side-Effects in Parallel Logic Programs	275
<i>Zhiyi Huang, Chengzheng Sun and Abdul Sattar</i>	
Tracing Lazy Functional Computations Using Redex Trails	291
<i>Jan Sparud and Colin Runciman</i>	

Education: Invited Paper

Functional Programming and Geometry	309
<i>Guy Cousineau</i>	

Education: Methodologies

<i>Where do I begin?</i>	
A Problem Solving Approach in Teaching Functional Programming	323
<i>Simon Thompson</i>	
Teaching Functional and Logic Programming with a Single Computation Model	335
<i>Michael Hanus</i>	
Logic Implemented Functionally	351
<i>Norbert Eisinger, Tim Geisler and Sven Panne</i>	

Education: Tools and Themes

DrScheme: A Pedagogic Programming Environment for Scheme	369
<i>Robert Bruce Findler, Cormac Flanagan, Matthew Flatt, Shriram Krishnamurthi, and Matthias Felleisen</i>	
An Editor for Helping Novices to Learn Standard ML	389
<i>Jon Whittle, Alan Bundy, and Helen Lowe</i>	
Introducing the Declarative Dungeon	407
<i>David DeRoure</i>	

Poster Presentations

A Pragmatic Approach to Compilation of Erlang	419
<i>Erik Johansson, Christer Jonsson, Thomas Lindgren, Johan Bevemyr, and Håkan Millroth</i>	
Formal Translations Described by Translation Grammars with $LR(k)$ Input Grammars	421
<i>Jan Janoušek and Bořivoj Melichar</i>	
Automatic Run-Time Code Generation in Object-Oriented Languages	423
<i>Nobuhisa Fujinami</i>	
Author index	425