

**Selected Papers from SBLP 2006: The 10th Brazilian  
Symposium on Programming Languages  
J.UCS Special Issue**

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The 10th Brazilian Symposium on Programming Languages, SBLP, was held at Simon Hotel, Itatiaia, Rio de Janeiro, Brazil, on May 15-17, 2006. The SBLP is an event sponsored by the Brazilian Computer Society (SBC). It is a forum where researchers, educators, and practitioners can present and discuss the fundamental principles and innovations in the design, definition, analysis, transformation and implementation of programming languages and systems.

This SBLP edition featured the following contributions: (i) two tutorials: *Pervasive Computation: how to program*, and *Web Services in Java*; (ii) 16 technical papers on the following topics: program transformations, mobile, www and network, optimisation, tools and programming language environment, and theoretical foundations; (iii) five invited talks: *Register Allocation via Coloring of Chordal Graphs* and *Sensor Network Programming* (Jens Palsberg, UCLA-USA); *The Scalability Problem of Denotational Semantics* (Roberto S. Bigonha, UFMG-Brazil); *Code Generation Techniques for Embedded Processors* (Guido Araújo, UNICAMP-Brazil) and *What is natural language? Differences compared to artificial languages, and consequences for natural language processing* (Diana Santos, Lisbon-Portugal).

The Program Committee of the 10<sup>th</sup> SBLP received 50 submissions (46 technical papers and 4 tutorials) from which 16 full papers and two tutorials were selected performing an acceptance rate below 35%. All submissions were evaluated by five reviewers.

This Special Issue of J.UCS presents 11 papers selected from the 16 papers accepted for the SBLP 2006. They are organized by themes:

- **Compiler Optimisation:** *The Design of the YAP Compiler: An Optimizing Compiler for Logic Programming Languages*, and *Our Experiences with Optimizations in Sun's Java Just-In-Time Compilers*.

• **Programming Transformations:** *Detecting Bad Smells in AspectJ; Program Slicing by Calculation*, and *The Language of the Visitor Design Pattern*.

• **Mobile, WWW and Network:** *Strong Mobility in Mobile Haskell; An Object Model for Interoperable Systems*, and *Expressing Workflow Patterns for Web Services: The case of PEWS*.

• **Theoretical Foundations:** *Generic Process Algebra: A Programming Challenge; Type-safe Versioned Object Query Language*, and *Defining Atomic Composition for UML Behavioral Diagrams*.

As the editors of these special issue we would like to thank the authors. Our gratitude also goes to the Program Committee members and external referees for their substantive reviews, last but not least, the editorial team of J.UCS represented by Dana Kaiser.

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(Itatiaia, may 15th, 2006 )

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