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Implementation and Application of Functional Languages

16th International Workshop, IFL 2004
Lübeck, Germany, September 8-10, 2004
Revised Selected Papers

13

Volume Editors

Clemens Grelck
University of Lübeck, Institute of Software Technology and Programming Languages
Ratzeburger Allee 160, 23538 Lübeck, Germany
E-mail: grelck@isp.uni-luebeck.de

Frank Huch
University of Kiel, Institute of Computer Science and Applied Mathematics
Olshausenstr. 40, 24098 Kiel, Germany
E-mail: fhu@informatik.uni-kiel.de

Greg J. Michaelson
Phil Trinder
Heriot-Watt University Edinburgh, School of Mathematical and Computer Sciences
Riccarton, EH14 4AS, UK
E-mail: {greg, trinder}@macs.hw.ac.uk

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Preface

The 16th International Workshop on Implementation and Application of Functional Languages (IFL 2004) was held in Lübeck, Germany, September 8–10, 2004. It was jointly organized by the Institute of Computer Science and Applied Mathematics of the University of Kiel and the Institute of Software Technology and Programming Languages of the University of Lübeck.

IFL 2004 was the sixteenth event in the annual series of IFL workshops. The aim of the workshop series is to bring together researchers actively engaged in the implementation and application of functional and function-based programming languages. It provides an open forum for researchers who wish to present and discuss new ideas and concepts, work in progress, preliminary results, etc., related primarily, but not exclusively, to the implementation and application of functional languages. Topics of interest cover a wide range from theoretical aspects over language design and implementation towards applications and tool support.

Previous IFL workshops were held in the United Kingdom (Southampton, Norwich, London, St Andrews, and Edinburgh), in the Netherlands (Nijmegen and Lochem), in Germany (Aachen and Bonn), in Sweden (Båstad and Stockholm), and in Spain (Madrid). In 2005, the 17th International Workshop on Implementation and Application of Functional Languages will be held in Dublin, Ireland.

As an innovation for IFL 2004, the term "application" was added to the workshop name; it was previously known as the International Workshop on Implementation of Functional Languages. This change was made after an intensive discussion following IFL 2003 in Edinburgh. Our aim was to reflect the broader scope IFL has gained over recent years and to make IFL even more attractive for researchers in the future. Continuity with previous workshops is expressed by keeping the well-known and familiar acronym IFL.

IFL 2004 attracted 59 researchers from 11 different countries. Most participants came from Europe: 13 from the United Kingdom, 6 from the Netherlands, 4 from Spain, 3 each from Denmark, Ireland, and France, 1 from Hungary, and 20 from Germany. We also welcomed 2 participants each from the United States, Mexico, and Australia. During the three days of the workshop 40 presentations were given, organized into 10 individual sessions. The draft proceedings distributed during the workshop contained 37 contributions. They were published as Technical Report 0408 of the Institute of Computer Science and Applied Mathematics of the University of Kiel.

This volume follows the IFL tradition since 1996 in publishing a high-quality subset of contributions presented at the workshop in the Springer Lecture Notes in Computer Science series. All participants who gave a presentation at the workshop were invited to resubmit revised versions of their contributions after

the workshop. We received 27 papers, each of which was reviewed by four members of the international Programme Committee according to normal conference standards. Following an intensive discussion the Programme Committee selected 13 papers to be included in this volume.

Since 2002 the Peter Landin Prize has been awarded annually to the author or the authors of the best workshop paper. The Programme Committee was pleased to give this prestigious award to Olivier Danvy for his contribution *A Rational Deconstruction of Landin's SECD Machine*. Previous Peter Landin Prize winners were Arjen van Weelden, Rinus Plasmeijer, and Pedro Vasconcelos.

IFL 2004 was generously sponsored by Deutsche Forschungsgemeinschaft (German Research Foundation), Innovationszentrum Lübeck, and the organizing institutes and universities. We are grateful to our sponsors for their financial and organizational support. We wish to thank all participants of IFL 2004 who made this workshop the successful event it was. Last but not least, we are indebted to the members of the Programme Committee who completed more than 100 reviews in a very short time frame.

March 2005

Clemens Grelck, Frank Huch,
Greg Michaelson, Phil Trinder

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