Intensional Programming I
Based on the Papers at ISLIP '95
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Editors

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Preface

There is a growing interest in computational models, and programming languages and systems based on intensional logics—such as temporal logic, interval logic and modal logic—and possible world semantics. In fact, a whole new programming model called intensional programming has emerged with applications in a wide range of areas including parallel programming, dataflow computation, temporal reasoning, scientific computation, software version control, real-time programming, temporal query languages, executable temporal logics, spreadsheets, attribute grammars, and hardware synthesis, to name a few. Intensional Programming is especially suited to application domains where the notion of dynamic change is central.

This collection features papers by researchers working in the field of intensional programming, and in some closely related areas. The papers deal with the theoretical foundations, design, implementation and prototype development issues, comparative studies, and applications, as well as those describing new challenges arising out of applications.

The collection is based on the revised and expanded versions of the successful papers presented at ISLIP'95: The Eighth International Symposium on Languages for Intensional Programming, which took place at Macquarie University in Sydney, NSW, Australia, on 3–5 May 1995. ISLIP'95 was the first in its series to be held outside North America. The original papers were made available to the participants in the form of an informal proceedings, and the revised versions have benefited from intensive discussions at the Symposium and feedback from the members of the Program Committee and the other authors.

The collection starts with a contribution by John Plaice and Joey Paquet which introduces the basic concepts of Intensional Programming using the World Wide Web as an example. It is based on a tutorial which was given by John Plaice on the first day of the Symposium. The contributions of the keynote speakers at ISLIP'95 follow the tutorial. The rest of the papers are grouped under eight headings, ranging from applications to dataflow architecture.

We would like to thank all the authors and the members of the Program Committee of ISLIP'95 for their contributions to the success and quality of the Symposium and of this collection. We would also like to thank The Department of Computing of Macquarie University for helping in the organization of the Symposium.

Mehmet A. Orgun & Edward A. Ashcroft
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