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Generic Programming

International Seminar on Generic Programming
Dagstuhl Castle, Germany, April 27-May 1, 1998
Selected Papers



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Series Editors

Gerhard Goos, Karlsruhe University, Germany
Juris Hartmanis, Cornell University, NY, USA
Jan van Leeuwen, Utrecht University, The Netherlands

Volume Editors

Mehdi Jazayeri
Technical University of Vienna
Information Systems Institute, Distributed Systems Group
Argentinierstr. 8/184-1, 1040 Vienna, Austria
E-mail: jazayeri@alum.mit.edu

Rüdiger G.K. Loos
Universität Tübingen
Wilhelm-Schickard-Institut für Informatik
Sand 13, 72076 Tübingen, Germany
E-mail: loos@informatik.uni-tuebingen.de

David R. Musser
Rensselaer Polytechnic Institute, Computer Science Department
Troy, NY 12180-3590, USA
E-mail: musser@cs.rpi.edu

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Preface

This volume contains contributed papers from participants in the Generic Programming Seminar held 27 April – 1 May 1998 at the Dagstuhl Conference Center in Wadern, Germany.

Generic programming is a sub-discipline of computer science that deals with finding abstract representations of efficient algorithms, data structures, and other software concepts, and with their systematic organization. The goal of generic programming is to express algorithms and data structures in a broadly adaptable, interoperable form that allows their direct use in software construction. Among the most obvious achievements of this relatively new programming paradigm are new libraries of software components, both in areas of fundamental and broadly used algorithms and data structures – the Standard Template Library – and in more specialized areas such as computer algebra, graph theory, and computational geometry. As useful as such components may be, however, they are probably less important than the overall generic programming methodology being developed. The papers collected here are reports from the field on the major problems and emerging solutions of generic programming methodology.

June 2000

Mehdi Jazayeri
Rüdiger Loos
David Musser

Organization

The Generic Programming Seminar was held 27 April – 1 May 1998 at the Conference Center of the Schloß Dagstuhl, located in Wadern, Germany (near Saarbrücken). There were forty nine attendees from ten countries. The formal program of the meeting included thirty seven lectures, a panel session on software library standardization, and a discussion of open problems and projects. Many informal discussions also took place, one of the many benefits of the Dagstuhl setting. The traditional Dagstuhl social event was at this meeting a Baroque concert held in the chapel of the Schloß.

Organizers

Mehdi Jazayeri	Technical University of Vienna
Rüdiger Loos	Tübingen University
David Musser	Rensselaer Polytechnic Institute
Alexander Stepanov	SGI

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David Abrahams	Mark of the Unicorn, Inc.
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Matt Austern	SGI
Ulrich Breymann	Hochschule Bremen
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Holger Gast	Tübingen University
Robert Glück	Copenhagen University
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Hoon Hong	North Carolina State University
Mehdi Jazayeri	Technical University of Vienna
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Nicolai Josuttis	Bredex
Erich Kaltofen	North Carolina State
Ullrich Köthe	Rostock University

Uwe Kreppel	Tübingen University
Wolfgang Küchlin	Tübingen University
Dietmar Kühl	Konstanz University
Gary Leavens	Iowa State University
Karl Lieberherr	Northeastern University
Rüdiger Loos	Tübingen University
Kurt Mehlhorn	MPI, Saarbrücken University
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Stefan Schirra	Saarbrücken University
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Georg Trausmuth	Technical University of Vienna
David Vandevoorde	Hewlett-Packard
Todd Veldhuizen	University of Waterloo
Bruce Weide	Ohio State University
Karsten Weihe	Konstanz University
Roland Weiss	Tübingen University
Reinhard Wilhelm	Saarbrücken University
Alexandre Zamulin	Russian Academy of Sciences, Novosibirsk
Wolf Zimmermann	Karlsruhe University

Table of Contents

Foundations and Methodology Comparisons

Fundamentals of Generic Programming	1
<i>James C. Dehnert, Alexander Stepanov (Silicon Graphics, Inc.)</i>	
Requirement Oriented Programming	12
<i>David Musser, Sibylle Schupp (Rensselaer Polytechnic Institute), Rüdiger Loos (University of Tübingen)</i>	
Generative Programming and Active Libraries	25
<i>Krzysztof Czarniecki (DaimlerChrysler), Ulrich Eisenecker (Fachhochschule Heidelberg), Robert Glück (University of Copenhagen), David Vandevoorde (Edison Design Group), Todd Veldhuizen (University of Indiana)</i>	
The Refinement Relation of Graph-Based Generic Programs	40
<i>Karl Lieberherr (Northeastern University), Boaz Patt-Shamir (Northeastern University and Tel Aviv University)</i>	
The Construction Principles of the Class Library KARLA	53
<i>Wolf Zimmermann (University of Karlsruhe), Arne Frick (Tom Sawyer Software), Rainer Neumann (University of Karlsruhe)</i>	

Programming Methodology

Exception-Safety in Generic Components	69
<i>David Abrahams (Dragon Systems)</i>	
Segmented Iterators and Hierarchical Algorithms	80
<i>Matthew H. Austern (Silicon Graphics, Inc.)</i>	
Theory and Generality of Complete Traversals	91
<i>David R. Musser (Rensselaer Polytechnic Institute), Arturo J. Sánchez-Ruiz (Central University of Venezuela)</i>	
A Data Abstraction Alternative to Data Structure/Algorithm Modularization	102
<i>Murali Sitaraman (West Virginia University), Bruce W. Weide, Timothy J. Long, William F. Ogden (Ohio State University)</i>	

Language Design

Two Ways to Bake Your Pizza—Translating Parameterised Types into Java 114
Martin Odersky (Ecole Polytechnique Fédérale de Lausanne), Enno Runne (University of Karlsruhe), Philip Wadler (Lucent Technologies)

SUCHTHAT—Generic Programming Works 133
Sibylle Schupp (Rensselaer Polytechnic Institute), Rüdiger Loos (University of Tübingen)

Specification and Verification

Software Development in PVS Using Generic Development Steps 146
Axel Dold (Universität Ulm)

Model Checking Generic Container Implementations 162
Matthew B. Dwyer, Corina S. Păsăreanu (Kansas State University)

Mizar Correctness Proofs of Generic Fraction Field Arithmetic 178
Christoph Schwarzweller (University of Tübingen)

Language Independent Container Specification 192
Alexandre V. Zamulin (Russian Academy of Sciences, Novosibirsk)

Applications

Applications of the Generic Programming Paradigm in the Design of CGAL 206
Hervé Brönnimann (INRIA Sophia-Antipolis), Lutz Kettner (ETH Zürich), Stefan Schirra (MPI Saarbrücken), Remco Veltkamp (Utrecht University)

Generic Programming in POOMA and PETE 218
James A. Crotinger, Julian Cummings, Scott Haney, William Humphrey, Steve Karmesin, John Reynders, Stephen Smith, Timothy J. Williams (Los Alamos National Laboratory)

The STL Model in the Geometric Domain 232
Ulrich Köthe (Fraunhofer Institute for Computer Graphics, Rostock), Karsten Weihe (University of Konstanz)

Generic Graph Algorithms 249
Dietmar Kühl (Claas Solutions)

A Generic Programming Environment
for High-Performance Mathematical Libraries 256
Wolfgang Schreiner, Werner Danielczyk-Landerl, Mircea Marin, Wolfgang Stöcher (RISC-Linz)

Author Index 269