# Lecture Notes in Computer Science 3628

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# Software
# Composition

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Revised Selected Papers

Volume Editors

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# Preface

Component-based software development is the next step after object-oriented programming that promises to reduce complexity and improve reusability. These advantages have also been identified by the industry, and consequently, over the past years, a large number of component-based techniques and processes have been adopted in many of these organizations. A visible result of this is the number of component models that have been developed and standardized. These models define how individual software components interact with each other and simplify the design process of software systems by allowing developers to choose from previously existing components.

The development of component models is a first step in the right direction, but there are many challenges that cannot be solved by the development of a new component model alone. Such challenges are the adaptation of components, and their development and verification.

Software Composition is the premiere workshop to advance the research in component-based software engineering and its related fields. SC 2005 was the fourth workshop in this series. As in previous years, SC 2005 was organized as an event co-located with the ETAPS conference.

This year's program consisted of a keynote on the revival of dynamic languages given by Prof. Oscar Nierstrasz and 13 technical paper presentations (9 full and 4 short papers). The technical papers were carefully selected from a total of 41 submitted papers. Each paper was thoroughly peer reviewed by at least three members of the program committee and consensus on acceptance was achieved by means of an electronic PC discussion. This LNCS volume contains the revised versions of the papers presented at SC 2005.

Finally, the organizers would like to express their gratitude to a large number of people without whom this event would not have been possible: the authors of submitted papers, the Program Committee, and the external referees for their careful reviews and active participation in the paper selection process, and Dirk Peters who managed the electronic submission and reviewing service with the fabulous Paperdyne Conference Management System. We would also like to thank Massimo Felici in his role as the ETAPS 2005 Satellite Events Chair who simplified our task considerably by scheduling our work and providing us with instructions.

June 2005

Thomas Gschwind
Uwe Aßmann
Oscar Nierstrasz
(Proceedings Editors)

# Organization

This year's Software Composition Workshop (SC 2005) was held on April 9, 2005, in Edinburgh, Scotland, as a co-located event of the ETAPS conference. SC 2005 was the fourth workshop in the SC workshop series. Previous workshops were held in 2004 in Barcelona, in 2003 in Warsaw, and in 2002 in Grenoble.

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