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LASER Summer School 2007/2008

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Preface

Only five years after its inception, the LASER Summer School on Software Engineering has established itself among the premier training schools for PhD students and professionals from the industry. Each year, the summer school focuses on an important software engineering topic. This book contains selected lecture notes from the LASER Summer Schools 2007 and 2008, both of which focused on correctness—Applied Software Verification in 2007 and Concurrency and Correctness in 2008.

From the 2007 summer school on Applied Software Verification, this volume contains contributions by Tony Hoare on the verification of fine-grain concurrency and transactions, by Benjamin Morandi, Sebastian Bauer, and Bertrand Meyer on the SCOOP model for concurrent object-oriented programming, by Rustan Leino and Peter Müller on the Spec# programming and verification system, and by Natarajan Shankar on verification in the Prototype Verification System PVS. From the 2008 summer school on Concurrency and Correctness, the volume includes lecture notes by Trygve Fossum on multi-core chip design.

I would like to thank the lecturers and their co-authors, who devoted much time to contributing to this volume. I am grateful to Marieke Huisman, Ling Liu, Rosemary Monahan, Matthew Parkinson, Sarvani Vakkalanka, and Hagen Völzer for their valuable feedback on drafts of the papers and to Marlies Weissert for her assistance in preparing the proceedings. Last but not least, I would like to thank Bertrand Meyer and his team for making the LASER Summer School such an enjoyable experience.

February 2010

Peter Müller

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