Principled Software Development

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Editors

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Essays Dedicated to Arnd Poetzsch-Heffter on the Occasion of his 60th Birthday

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Preface

University professors have the great privilege that they can impact society in three major ways: by contributing scientific results and advising PhD students, by educating students, and through political and managerial work that shapes the research and education infrastructures that will allow future generations to accomplish their goals.

Arnd Poetzsch-Heffter is among the few professors who have been very successful in all three dimensions. Throughout his career, he has made major scientific contributions in a wide range of topics related to programming languages, software technology, and formal methods; he has been a passionate and demanding teacher and advisor, and he advanced TU Kaiserslautern as Department Chair and Vice President for Research, Technology, and Innovation. This book honors Arnd's achievements on the occasion of his 60th birthday.

Arnd studied Computer Science at TU Munich, where he also obtained his PhD in 1991 with a thesis on the Formal Specification of Context-Sensitive Syntax of Programming Languages. In 1997, Arnd obtained his habilitation with a thesis on the Specification and Verification of Object-Oriented Programs, also from TU Munich. He was Associate Professor at the University of Hagen from 1996 to 2002, has been Full Professor at TU Kaiserslautern since 2002, and Vice President since 2014.

This book contains articles related to Arnd's broad research interests including, among others, implementation of programming languages, formal semantics, specification and verification of object-oriented and concurrent programs, programming language design, distributed systems, software modeling, and software product lines. We collected the contributions by contacting Arnd's collaborators, colleagues, and former students. We were overwhelmed by the positive reactions. As a result, this book contains a collection of high-quality articles, presenting original research results, major case studies, and inspiring visions. Some of the work included in this book will be presented at a symposium to be held in Kaiserslautern in November 2018.

We would like to thank the authors for contributing to this book, Alexandra Bugariu, Marco Eilers, Sascha Lity, Stephan Mennicke, Tobias Runge, Sven Schuster, and Arshavir Ter-Gabrielyan for their help with copy-editing, Alexander Knüppel for compiling the LaTeX sources, Arnd's wife Edel Modschiedler for her stealth operation to take the picture on the book cover, and Annette Bieniusa for her help with the organization of the symposium. Our biggest thanks goes to Arnd Poetzsch-Heffter for being a truly exceptional PhD advisor and a role model to aspire to. Happy Birthday!

Zürich, Switzerland — Peter Müller
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