

# Preface

This book collects part of the research results from the Critical Software Technology for an Evolutionary Partnership (CRITICAL STEP, <http://www.critical-step.eu/>), which is a Marie-Curie Industry-Academia Partnerships and Pathways (IAPP), belonging to call FP7-PEOPLE-2008-IAPP. The project aimed to establish the basis for long-term strategic research collaboration between partners in the growing and challenging domain of software for large-scale Safety-Critical Systems (SCSs), based on the use of Off-The-Shelf (OTS), software components.

I was honored to coordinate this project with four great partners, very active in the research on dependability technologies for critical systems: SESM and Critical Software, from the industrial side, and CINI University of Naples and University of Coimbra, from the academic one. According to the FP7-PEOPLE-2008-IAPP funding schema, partners shared and combined their knowledge and use the existing synergies/complementarities to set long-term strategic bases to deal with the complexity of the next generation SCSs. The project was implemented via secondments and recruitments of 182 RM in total: 72 RM for recruitment of three experienced researchers and 110 RM for secondments of 13 research fellows from the participating organizations. The researchers involved in the Transfer of Knowledge (ToK), program between Industry and Academy have produced excellent results that this book presents. At the end of this experience, I do believe that the Marie-Curie IAPP project has the real potential of boosting the academic/industry collaborations and, more in general, the skill of European-wide researchers.

This book is written for engineers and researchers working in the field of dependability. It comprises four parts, i.e., V&V Safety Critical Systems, Fault Injection, Security, and Monitoring and Diagnosing, with a total of 12 contributions, written by researchers belonging to the project. Furthermore, the book provides three introductory papers about the research topics of the project.

Beyond the acknowledgments contained in the chapters of this book, I would like to especially thank the European Commission, which has financed the project and, in particular, Lionel Boillot, the project officer, for his continual support and advice. I would also like to thank Francesca Capobianco for her support in the organizational activities for this book.

Domenico Cotroneo

Innovative Technologies for Dependable OTS-Based  
Critical Systems

Challenges and Achievements of the CRITICAL STEP  
Project

Cotroneo, D. (Ed.)

2013, VIII, 216 p., Hardcover

ISBN: 978-88-470-2771-8