

Books in Logic and Computer Science

EGON BÖRGER

1. Berechenbarkeit, Komplexität, Logik.

Eine Einführung in Algorithmen, Sprachen und Kalküle unter besonderer Berücksichtigung ihrer Komplexität.

Verlag Vieweg, Braunschweig 1985 (1), 1986(2): pp. XVIII+469; 1992(3): pp. XVIII+499

- **Computabilità, Complessità, Logica.**

Vol.1: *Teoria della Computazione.*

Ital.Translation, Bollati Boringhieri, Torino 1989, pp.369.

- **Computability, Complexity, Logic.**

English Translation, in: *Studies in Logic and the Foundations of Mathematics*, vol. 128, North-Holland, Amsterdam 1989, pp. XX+592.

See <http://www.di.unipi.it/boerger/cclbook.html> for the table of contents and <http://www.di.unipi.it/boerger/cclbookreviews.html> for 16 reviews.

2. The Classical Decision Problem.

(With E.Grädel, Y.Gurevich)

Perspectives in Mathematical Logic, Springer-Verlag Berlin, Heidelberg etc., 1997, pp. XII+482, ISBN 3-540-57073-X. Second printing in "Universitext", Springer-Verlag 2001, ISBN 3-540-42324-9.

See <http://www.di.unipi.it/boerger/decpbllbook.html> for Preface, Introduction, Table of Contents and a review.

3. Java and the Java Virtual Machine: Definition, Verification, Validation.

(With R. Stärk and J. Schmid)

Springer-Verlag (ISBN 3-540-42088-6) Berlin-Heidelberg-New York, 2001, pp.X+381+CD-ROM. Republished in 2003 in Springer's Textbook CD-ROM.

See <http://www.di.unipi.it/boerger/jbook> for some highlights and downloadable material including slides for lecturing. Pieter Hartel and Luc

Moreau dedicate to the discussion of this book an entire section (6.2) of their authoritative review *Formalizing the Safety of Java, the Java Virtual Machine and Java Card* (ACM Computing Surveys, 33(4):517-558 2001, see <http://www.ub.utwente.nl/webdocs/ctit/1/00000050.pdf>). On page 540 of Section 6.2 they resume their review by the statement that the book *gives the most comprehensive and consistent formal account of the combination of Java and the JVM.*

4. **Abstract State Machines. A Method for High-Level System Design and Analysis.**

(With R. Stärk)

Springer-Verlag (ISBN 3-540-00702-4) Berlin-Heidelberg-New York, 2003, pp.X+438+CD-ROM. See <http://www.di.unipi.it/boerger/AsmBook> for downloadable material including slides for lecturing and a review from *The Computer Journal* 47 (2) 2004, pg. 270-271.

5. **Subjektorientiertes Prozessmanagement.**

(With A. Fleischmann, W. Schmidt, C. Stary, S. Obermeier)

Hanser-Verlag, München, pp. 434, 2011. ISBN-10: 3-446-42707-7 and ISBN-13: 978-3-446-42707-5.

See <http://www.hanser.de/buch.asp?isbn=978-3-446-42707-5&area=Wirtschaft>

1 Textbooks

1. **Fondamenti di Informatica.**

(With A.Maggiolo-Schettini.)

Undergraduate text, ETS Editrice, Pisa 1988, pp. 87.

2. **Introduction into the Theory of Computation.**

HyperCOSTOCTM-Course (COmputer Supported Teaching Of Computer science)

10 Lessons developed with AUTOOL + handbook (pp.334).

Edited with assistance of R.Bellucci, G.Pulice, E.Vannini, R.Gherardi. Hofbauer, München 1989