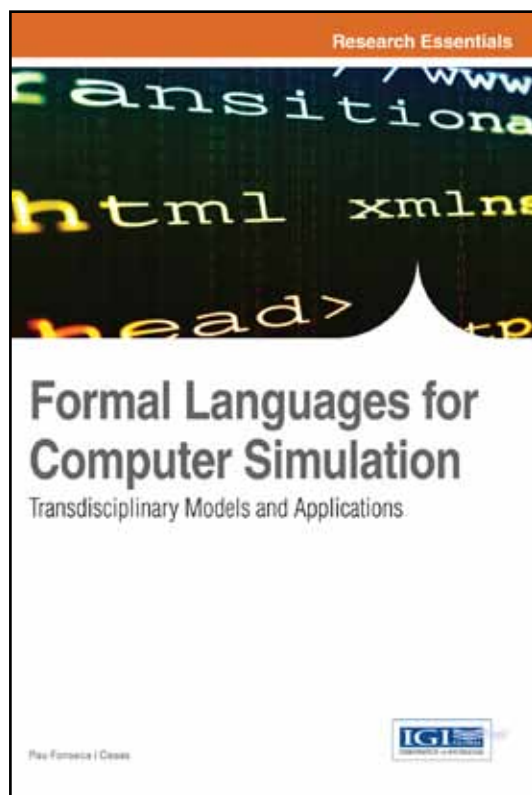


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Formal Languages for Computer Simulation: Transdisciplinary Models and Applications



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Models and simulations are an important first step in developing computer applications to solve real-world problems. However, in order to be truly effective, computer programmers must use formal modeling languages to evaluate these simulations.

Formal Languages for Computer Simulation: Transdisciplinary Models and Applications investigates a variety of programming languages used in validating and verifying models in order to assist in their eventual implementation. This book will explore different methods of evaluating and formalizing simulation models, enabling computer and industrial engineers, mathematicians, and students working with computer simulations to thoroughly understand the progression from simulation to product, improving the overall effectiveness of modeling systems.

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- Discrete Event System Specification
- Forrester Diagrams
- Mapping Techniques
- Petri Nets
- Simulation Tools
- Specification and Description Languages
- Transformation Algorithms
- Unified Modeling Language

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Pau Fonseca i Casas is a Professor of the Department of Statistics and Operational research of the Polytechnic University of Catalonia, teaching in Statistics and Simulation areas. He obtained his master degree in computer engineering on 1999 and his Ph.D. on 2007 from Polytechnic University of Catalonia. He also works in the . His research interests are discrete simulation applied to industrial, environmental and social models, and the formal representation of such models.

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