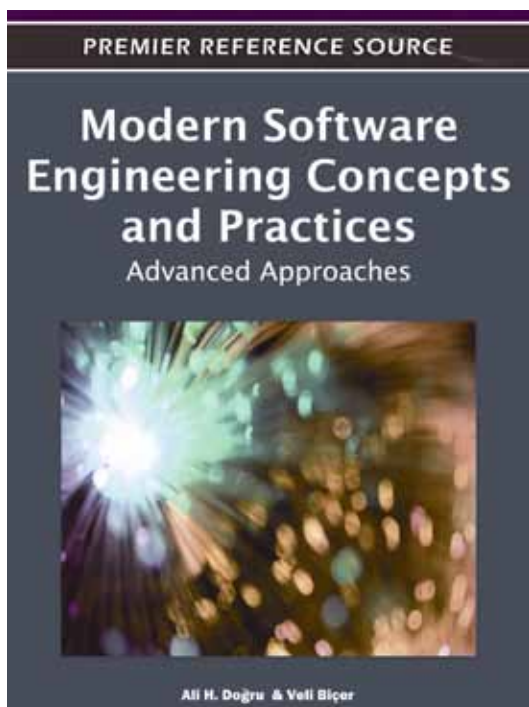


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Modern Software Engineering Concepts and Practices: Advanced Approaches



Ali H. Dogru (Middle East Technical University, Turkey) and
Veli Biçer (FZI Research Center for Information Technology, Germany)

Software engineering has advanced rapidly in recent years in parallel with the complexity and scale of software systems. New requirements in software systems yield innovative approaches that are developed either through introducing new paradigms or extending the capabilities of well-established approaches.

Modern Software Engineering Concepts and Practices: Advanced Approaches provides emerging theoretical approaches and their practices. This book includes case studies and real-world practices and presents a range of advanced approaches to reflect various perspectives in the discipline.

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- Architecture-centered compositional verification
- Architecture-driven modernization
- Business-value-based management of agile software-development and processes
- Cognitive complexity measures
- Implementing a process-oriented migration strategy
- Missing data in software cost estimation
- Model-driven development of multi-core embedded software
- Model-driven techniques in developing domain specific design tools
- Reliability-aware software architecture design and experience
- Software development paradigms

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Ali H. Dogru, Ph.D., is an associate professor at the Middle East Technical University's Computer Engineering Department, where he is directing the Software Engineering Laboratory. Besides conducting education and training internationally, he is also involved in the development of complex software intensive systems.



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