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Titolo	Systems engineering of software-enabled systems // Richard E. Fairley, Software Engineering Management Assoc., CO, US
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Descrizione fisica	1 online resource (414 pages)
Collana	THEi Wiley ebooks.
Disciplina	005.1
Soggetti	Software engineering - Computer programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Systems engineering and software engineering -- Issues and opportunities for improvements -- Traditional process models for system development -- The integrated iterative-incremental system development model -- The I3 systems definition phase -- System requirements definition -- Architecture definition and design definition -- System implementation and delivery -- Planning and estimating the technical work -- Assessing, analyzing, and controlling technical work -- Organizing, leading, and coordinating.
Sommario/riassunto	A comprehensive review of the life cycle processes, methods, and techniques used to develop and modify software-enabled systems Systems Engineering of Software-Enabled Systems offers an authoritative review of the most current methods and techniques that can improve the links between systems engineering and software engineering. The author-a noted expert on the topic-offers an introduction to systems engineering and software engineering and presents the issues caused by the differences between the two during development process. The book reviews the traditional approaches used by systems engineers and software engineers and explores how they differ. The book presents an approach to developing software-

enabled systems that integrates the incremental approach used by systems engineers and the iterative approach used by software engineers. This unique approach is based on developing system capabilities that will provide the features, behaviors, and quality attributes needed by stakeholders, based on model-based system architecture. In addition, the author covers the management activities a systems engineer or software engineer must engage in to manage and lead the technical work to be done. This important book: -Offers an approach to improving the process of working with systems engineers and software engineers -Contains information on the planning and estimating, measuring and controlling, managing risk, and organizing and leading systems engineering teams -Includes a discussion of the key points of each chapter and exercises for review -Suggests numerous references that provide additional readings for development of software-enabled physical systems -Provides two case studies as running examples throughout the text

Written for advanced undergraduates, graduate students, and practitioners, *Systems Engineering of Software-Enabled Systems* offers a comprehensive resource to the traditional and current techniques that can improve the links between systems engineering and software engineering.

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