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Soggetti	Software engineering Management information systems Computer science Mathematical logic Computer security Software Engineering Software Management Management of Computing and Information Systems Mathematical Logic and Formal Languages Systems and Data Security
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Nota di contenuto	Preface -- Software Process -- Requirements Engineering -- Software Architecture and Design -- Software Testing -- Formal Methods -- Software Evolution -- Empirical Software Engineering -- Software Reuse and Product Line Engineering -- Key Software Engineering Paradigms and Methods -- Coordination Technology -- Self-Adaptive Systems -- Security and Software Engineering -- Software Engineering in the Cloud.
Sommario/riassunto	This handbook provides a unique and in-depth survey of the current state-of-the-art in software engineering, covering its major topics, the conceptual genealogy of each subfield, and discussing future research directions. Subjects include foundational areas of software engineering (e.g. software processes, requirements engineering, software architecture, software testing, formal methods, software maintenance)

as well as emerging areas (e.g., self-adaptive systems, software engineering in the cloud, coordination technology). Each chapter includes an introduction to central concepts and principles, a guided tour of seminal papers and key contributions, and promising future research directions. The authors of the individual chapters are all acknowledged experts in their field and include many who have pioneered the techniques and technologies discussed. Readers will find an authoritative and concise review of each subject, and will also learn how software engineering technologies have evolved and are likely to develop in the years to come. This book will be especially useful for researchers who are new to software engineering, and for practitioners seeking to enhance their skills and knowledge.