1. Record Nr. UNINA9911019246903321

Titolo	Software technology : 10 years of innovation in IEEE Computer / / edited by Mike Hinchey
Pubbl/distr/stampa	Hoboken, New Jersey : , : IEEE Computer Society, Inc., , 2018 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2018]
ISBN	9781119174233 1119174236 9781119174226 1119174228 9781119174240 1119174244
Edizione	[First edition.]
Descrizione fisica	1 online resource (373 pages)
Disciplina	005.1
Soggetti	Software engineering - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1: The Software Landscape -- Chapter 1: Software Crisis 2.0 / Brian Fitzgerald -- Chapter 2: Simplicity as a Driver for Agile Innovation / Tiziana Margaria and Bernhard Steffen -- Chapter 3: Inter-Component Dependency Issues in Software Ecosystems / Malick Claes, Alexandre Decan, and Tom Mens -- Chapter 4: Triangulation Research Dissemination Methods: A Three Pronged Approach to Close the Research /Practice Divide / Sarah Beecham, Ita Richardson, Ian Sommerville, Padraig O'Leary, Sean Baker, and John Noll -- Part 2: Autonomous Software Systems -- Chapter 5: Apoptotic Computing: Programmed Death by Default for Software Technologies / Roy Sterritt and Mike Hinchey -- Chapter 6: Requirements Engineering for Adaptive and Self-Adaptive Systems / Emil Vassev and Mike Hinchey -- Chapter 7: Toward Artificial Intelligence through Knowledge Representation for Awareness / Emil Vassev and Mike Hinchey -- Part 3: Software Development and Evolution -- Chapter 8: Continuous Model-Driven Engineering / Tiziana Margaria, Anna-Lena Lamprecht, and Bernhard Steffen -- Chapter 9: Rethinking Functional Requirements: A Novel

Approach Categorizing System and Software Requirements / Manfred Broy -- Chapter 10: The Power of Ten - Rules for Developing Safety Critical Code / Gerard J.Holzmann -- Chapter 11: Seven Principles of Software Testing / Bertrand Meyer -- Chapter 12: Analyzing the Evolution of Database Usage in Data-Intensive Software Systems / Loup Meurice, Mathieu Goeminne, Tom Mens, Csaba Nagy, Alexandre Decan, and Anthony Cleve -- Part 4: Software Product Lines and Variability -- Chapter 13: Dynamic Software Product Lines / Sven Hallsteinsen, Mike Hinchey, Sooyong Park, and Klaus Schmid -- Chapter 14: Cutting-Edge Topics in Dynamic Software Variability / Rafael Capilla, Jan Bosch, and Mike Hinchey -- Part 5: Formal Methods -- Chapter 15: The Quest for Formal Methods in Software Product Line Engineering / Reiner Hhnle and Ina Schaefer -- Chapter 16: Formality, Agility, Security, and Evolution in Software Engineering / Jonathan P. Bowen, Mike Hinchey, Helge Janicke, Martin Ward, and Hussein Zedan -- Part 6: Cloud Computing -- Chapter 17: Cloud Computing: An Exploration of Factors Impacting Adoption / Lorraine Morgan and Kieran Conboy -- Chapter 18: A Model-Centric Approach to the Design of Resource-Aware Cloud Applications / Reiner Hhnle and Einar Broch Johnsen .

Sommario/riassunto

Sales handles: - Introduces the software landscape and challenges associated with emerging technologies - Covers the life cycle of software products, including concepts, requirements, development, testing, verification, evolution, and security - Written by leaders in the software industry - Articles cover both theoretical and practical topics Market description: Primary Audience: Researchers and Practitioners Secondary Audience: Graduate Students--