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Soggetti	Internet of things - Security measures - Testing Computer security Penetration testing (Computer security)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I: Getting Started -- Chapter 1: The Internet of Things, V and V, and Testing -- Chapter 2: IoT Technology in Time and Space -- Chapter 3: Big Picture Lessons Learned in IoT Project Test Planning -- Chapter 4: Factors Driving IoT Testing/V and V Selection and Planning -- Chapter 5: Beginner Keys for Starting IoT Test Planning -- Part II: IoT Planning, Test, Strategy and Architecture - Team Leadership -- Chapter 6: IoT Test Plan: Strategy and Architecture Introductions -- Chapter 7: IoT Test Planning and Strategy for Hardware and Software -- Chapter 8: Planning for the IoT Tester on Environments and Testing Details -- Chapter 9: System Engineering Concepts in IoT Test Planning -- Part III: IoT Test Designs and Security Assessments -- Chapter 10: IoT Test Design: Frameworks, Techniques, Attacks, Patterns, and Tours -- Chapter 11: Classic IoT V and V/Test Concepts, Techniques, and Practices -- Chapter 12: Test Approaches and Quality Assessments for IoT Agile/DevOps -- Chapter 13: IoT Software Security Test Attacks and Designs -- Chapter 14: OWASP IoT Information Pointer, and Logging Events -- Chapter 15: Internal Security Team Penetration Test Process -- Chapter 16: IoT Test Environment Introduction -- Part IV: IoT Architectures, Environments, and Integrated Independent Testing -- Chapter 17: Architectures Critical to Project Success -- Chapter 18: Overview of IoT Software Architectures: Products and Testing Support

-- Chapter 19: IoT STA System: Software Integration Lab (SIL) Environments -- Chapter 20: Tools for the Software-System Integration Lab (SIL) -- Chapter 21: Environments for Independent Testing and V and V on Large IoT Systems -- Chapter 22: Self-Organizing Data Analytics (SODA): IoT Data Analytics, AI, and Statistics -- Appendix A: IoT Supporting Interface, Hardware, Platform, and Protocol Standards -- Appendix B: Careers in IoT Testing -- Appendix C: IoT Testing Start-up Checklist.

Sommario/riassunto

To succeed, teams must assure the quality of IoT systems. The world of technology continually moves from one hot area to another; this book considers the next explosion of IoT from a quality testing viewpoint. You'll first gain an introduction to the Internet of Things (IoT), V&V, and testing. Next, you'll be walked through IoT test planning and strategy over the full life cycle, including the impact of data analytics and AI. You will then delve deeper into IoT security testing and various test techniques, patterns, and more. This is followed by a detailed study of IoT software test labs, architecture, environments and AI. There are many options for testing IoT qualities based on the criticality of the software and risks involved; each option has positives, negatives, as well as cost and schedule impacts. The book will guide start-up and experienced teams into these paths and help you to improve the testing and quality assessment of IoT systems. You will: Understand IoT software test architecture and planning Master IoT security testing and test techniques Study IoT test lab automation and architectures Review the need for IoT security, data analytics, AI, Neural Networks and dependability using testing and V&V.
