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Autore	Parsons Simon, Dr.
Titolo	Introduction to potable water treatment processes [[electronic resource] /] / Simon A. Parsons and Bruce Jefferson
Pubbl/distr/stampa	Oxford ; ; Ames, Iowa, : Blackwell Pub., 2006
ISBN	1-281-21487-6 9786611214876 0-470-76194-6 1-4443-4166-9 1-4443-0547-6 1-4051-7264-9
Descrizione fisica	1 online resource (190 p.)
Altri autori (Persone)	JeffersonBruce
Disciplina	628.162
Soggetti	Water - Purification Drinking water - Purification Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; 1 Water Quality Regulations; 2 Water Sources and Demand; 3 Coagulation and Flocculation; 4 Clarification Processes; 5 Dissolved Air Flotation; 6 Filtration Processes; 7 Membrane Processes; 8 Adsorption Processes; 9 Disinfection; 10 Organics Removal; 11 Inorganics Removal; 12 Sludge Treatment and Disposal; Index
Sommario/riassunto	The availability of a reliable supply of water is one of the most important determinants of human health, with the supply of clean drinking water being a multibillion dollar industry in the developed world and a key concern for less developed countries. Introduction to Potable Water Treatment Processes illustrates the link between raw water quality and treatment process selection and performance. Individual chapters concentrate on specific water treatment processes, detailing the chemical and engineering principles behind the process, and further illustrating process implementation by

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Titolo	Protocols, strands, and logic : essays dedicated to Joshua Guttman on the the occasion of his 66.66th birthday / / Daniel Dougherty [and three others], editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-91631-6
Descrizione fisica	1 online resource (435 pages)
Collana	Lecture Notes in Computer Science ; ; 13066
Disciplina	005.8
Soggetti	Computer networks - Security measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Securing Node-RED Applications -- 1 Introduction -- 2 Node-RED Vulnerabilities -- 2.1 Node-RED Platform -- 2.2 Platform-Level Isolation Vulnerabilities -- 2.3 Application-Level Context Vulnerabilities -- 3 Formalization -- 3.1 Language Syntax and Semantics -- 3.2 Security Condition and Enforcement -- 4 Related Work -- 5 Conclusion -- References -- Protocol Analysis with Time and Space -- 1 Introduction -- 1.1 Related Work -- 2 Two Time and Space Protocols -- 3 A Time and Space Process Algebra -- 3.1 New Syntax for Location -- 3.2 Time and Space Intruder Model -- 3.3 Time and Space Process Semantics -- 4 Time and Space Process Algebra into Untimed Process Algebra -- 5 Timed Process Algebra into Strands in Maude-NPA -- 6 Conclusions -- References -- Searching for Selfie in TLS 1.3 with the Cryptographic Protocol Shapes Analyzer -- 1 Introduction -- 2 Background -- 2.1 Cryptographic Protocol Shapes Analyser -- 2.2 TLS 1.3 Pre Shared Key Authentication -- 2.3 Selfie Attack -- 3 Modeling TLS 1.3 PSK Authentication -- 3.1 Models of the TLS 1.3 PSK Authentication -- 3.2 Modeling the Proposed Fixes to the Selfie Attack -- 4 Discussion -- 5 Conclusions -- A Appendix -- References -- A Tutorial-Style Introduction to DY -- 1 Introduction -- 2 The DY Framework -- 3 The ISO-DH Protocol -- 4 Modeling ISO-DH in DY -- 5 Security Analysis -- 5.1 Forward Secrecy -- 5.2 Authentication Properties -- 6 Conclusion -- References -- Security Protocols as

Choreographies -- 1 Introduction -- 2 The Envelope Protocol and Its Choreographic Description -- 3 Projection and Refinement -- 3.1 Projection -- 3.2 Refinement -- 4 Verification in Tamarin -- 5 Related Work -- 6 Conclusion -- References -- How to Explain Security Protocols to Your Children -- 1 Introduction -- 2 Storyboard -- 2.1 Our First Security Protocol.
2.2 How the Postman Steals Isabelle's Cake -- 2.3 A Fix: Asymmetric Encryption -- 2.4 Denial of Service? -- 3 When it Gets Really Dark -- 3.1 Challenge and Respond -- 3.2 Man in the Middle Attack -- 3.3 A Countermeasure -- 4 A Practical Session -- 4.1 The Material -- 4.2 A Typical Session -- 4.3 Long-Term Variants of the Design-Attack Parts (advanced) -- 5 Conclusion: Have Fun! -- References -- Verifying a Blockchain-Based Remote Debugging Protocol for Bug Bounty -- 1 Introduction -- 2 Background: VeriOSS -- 2.1 Workflow Overview -- 2.2 Challenge-Response Interaction -- 2.3 Remote Debugging, and Challenge Generation and Solution -- 3 Protocol Encoding -- 4 Verification in ProVerif -- 5 Conclusion -- References -- Quantum Machine Learning and Fraud Detection -- 1 Introduction -- 2 Detecting Fraudulent Transactions -- 2.1 Support Vector Machines -- 2.2 Quantum Matrix Inversion and Probabilistic Abstract Interpretation -- 3 Quantum Machine Learning -- 3.1 Quantum Support Vector Machines -- 3.2 Quantum Support Vector Machines as PAI -- 4 Implementation of Quantum Fraud Detection -- 4.1 Experiments on the IBM Quantum Platform -- 5 Conclusion -- References -- Model Finding for Exploration -- 1 Introduction -- 2 Foundations -- 2.1 Homomorphism Orderings -- 3 Approaches to Model Finding -- 4 Three Principles for Model Finding Assistants -- 4.1 Fitness -- 4.2 Exploration of Individual Models -- 4.3 Completeness -- 5 Geometric Logic -- 6 Direct Model Finding Methods -- 6.1 Chase-Based Approaches -- 6.2 cpsa -- 7 Programming Against a Solver: Theory -- 7.1 Building Blocks -- 7.2 Minimization -- 7.3 Set of Support -- 8 Programming Against a Solver: Practice -- 8.1 Constructing HomTo and HomFrom for Arbitrary Homomorphisms -- 8.2 Constructing HomTo and HomFrom for Submodel Morphisms -- 8.3 Constructing homTo and homFrom for Injective Morphisms -- 9 Conclusion.
References -- Secure Key Management Policies in Strand Spaces -- 1 Introduction -- 2 Background and Related Work -- 2.1 The Strand Space Model -- 2.2 The CPSA Tool -- 2.3 Attacks on the PKCS#11 API -- 2.4 Related Work -- 3 Key Management Policies -- 4 Key Management APIs -- 4.1 An Untyped, Vulnerable API -- 4.2 A Secure, Typed API -- 4.3 Examples -- 5 Conclusion -- References -- A Declaration of Software Independence -- 1 Introduction -- 2 Formalizing Software Independence -- 2.1 Software Independence... of What? -- 2.2 Voting System and Its Software -- 2.3 Available Audits -- 3 Possibilistic Formulation of Software Independence -- 3.1 Basic Formulation -- 3.2 Relationship to End-to-End Verifiability -- 3.3 SI with Adaptive Audits -- 3.4 A Refinement -- 3.5 Software Resilience -- 3.6 Thought Experiment -- 3.7 Software Independence for Probabilistic Audits -- 4 Probabilistic/Game-Theoretic Definition -- 4.1 Terminology and Notation -- 4.2 Game-Theoretic Definition of SI -- 5 Conclusions -- References -- Formal Methods and Mathematical Intuition -- 1 Introduction -- 2 Formal Methods and Research at MITRE -- 3 Mathematical Intuition and Heuristics -- 4 Example: Development of Dimension Concepts and Dimension Theories -- 5 L. E. J. Brouwer's Breakthrough to Invariance of Dimension -- 6 Conclusion: Formal Methods, Mathematical Intuition, and Rigorous Mathematical Exposition -- References -- Establishing the Price of Privacy in Federated Data Trading -- 1 Introduction -- 2 Preliminaries -- 2.1 Differential Privacy

-- 2.2 Shapley Value -- 3 Related Works -- 4 Differentially Private Data Trading Mechanism -- 4.1 Mechanism Outline -- 4.2 Earning Splitting -- 5 Experimental Results -- 5.1 Experimental Environments -- 5.2 Number of Rounds Needed for Data Collection -- 5.3 Number of Free Riders by Penalty Scheme -- 5.4 Reduced Shapley Value Computation Time.
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4.3 Towards Protocols for Noisy Muddy Mistrustful Children -- References -- Joshua Guttman: Pioneering Strand Spaces -- 1 Introduction -- 2 Strand Spaces -- 3 Concluding Remarks -- References -- Cryptographic Protocol Analysis and Compilation Using CPSA and Roletran -- 1 Introduction -- 2 Message Algebras -- 3 Strand Spaces with Channels -- 3.1 Unilateral Protocol Example -- 3.2 Channel Assumptions -- 4 Abstract Execution Semantics -- 4.1 Correctness -- 5 A Runtime with Probabilistic Encryption -- 6 Concrete Execution Semantics -- 7 Relating Execution Semantics -- 8 Epilogue -- References -- On Orderings in Security Models -- 1 Introduction -- 2 Preliminaries -- 3 Attack Trees -- 4 Copland -- 5 Attribute Domains -- 6 Copland Trust Ordering -- 7 Cryptographic Protocols -- 8 Conclusion -- References -- Prototyping Formal Methods Tools: A Protocol Analysis Case Study -- 1 Introduction -- 2 End-To-End Language-Oriented Modeling -- 2.1 Protocol Analysts: Custom Visualization and Queries -- 2.2 The Protocol Creator: Translating Domain-Specific Input -- 2.3 Scripting and Extensibility -- 3 Relational Model Finding -- 4 Modeling Protocol Executions -- 5 Processing cpsa Declarations -- 5.1 Deriving Relational Constraints -- 5.2 Queries and Predicates -- 6 Visualizing Strands -- 7 Prototype Performance -- 8 Related Work -- 9 Discussion -- References -- Principles of Remote Sattestation -- 1 Introduction -- 2 Overview of Self-authenticating Traditional Addresses -- 2.1 Third-Party Sattestation -- 2.2 Trust Yourself…, But Verify -- 3 Principles of (S)attestation -- References --