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Collana	Security and Cryptology ; ; 6442
Disciplina	005.82
Soggetti	Data encryption (Computer science) Game theory Computer communication systems Computer security Algorithms Management information systems Computer science Cryptology Game Theory, Economics, Social and Behav. Sciences Computer Communication Networks Systems and Data Security Algorithm Analysis and Problem Complexity Management of Computing and Information Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Security Investments and Planning -- Design of Network Topology in an Adversarial Environment -- Optimal Information Security Investment with Penetration Testing -- Privacy and Anonymity -- Tracking Games in Mobile Networks -- gPath: A Game-Theoretic Path Selection Algorithm to Protect Tor's Anonymity -- When Do Firms Invest in Privacy-Preserving Technologies? -- Adversarial and Robust Control --

Adversarial Control in a Delay Tolerant Network -- Security  
Interdependencies for Networked Control Systems with Identical Agents  
-- Robust Control in Sparse Mobile Ad-Hoc Networks -- Network  
Security and Botnets -- A Game-Theoretical Approach for Finding  
Optimal Strategies in a Botnet Defense Model -- ISPs and Ad Networks  
Against Botnet Ad Fraud -- A Localization Game in Wireless Sensor  
Networks -- Effective Multimodel Anomaly Detection Using Cooperative  
Negotiation -- Authorization and Authentication -- The Password  
Game: Negative Externalities from Weak Password Practices -- Towards  
a Game Theoretic Authorisation Model -- Theory and Algorithms for  
Security -- Disperse or Unite? A Mathematical Model of Coordinated  
Attack -- Uncertainty in Interdependent Security Games -- Attack-  
Defense Trees and Two-Player Binary Zero-Sum Extensive Form Games  
Are Equivalent -- Methods and Algorithms for Infinite Bayesian  
Stackelberg Security Games.

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#### Sommario/riassunto

Securing complex and networked systems has become increasingly important as these systems play an indispensable role in modern life at the turn of the - formation age. Concurrently, security of ubiquitous communication, data, and computing poses novel research challenges. Security is a multi-faceted problem due to the complexity of underlying hardware, software, and network inter- pendencies as well as human and social factors. It involves decision making on multiple levels and multiple time scales, given the limited resources available to both malicious attackers and administrators defending networked systems. - cision and game theory provides a rich set of analytical methods and approaches to address various resource allocation and decision-making problems arising in security. This edited volume contains the contributions presented at the inaugural Conference on Decision and Game Theory for Security - GameSec 2010. These 18 articles (12 full and 6 short papers) are thematically categorized into the following six sections: – “Security investments and planning” contains two articles, which present optimization methods for (security) investments when facing adversaries. – “Privacy and anonymity” has three articles discussing location privacy, - line anonymity, and economic aspects of privacy. – “Adversarial and robust control” contains three articles, which investigate security and robustness aspects of control in networks. – “Networksecurityandbotnets”hasfourarticlesfocusingondefensivestrategiesagainstbotnetsaswellasdetectionofmaliciousadversariesinnetworks. – “Authorization and authentication” has an article on password practices and another one presenting a game-theoretic authorization model. – “Theory and algorithms for security” contains four articles on various th- retic and algorithmic aspects of security.

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