

Contents

Full Papers

Optimizing Traffic Enforcement: From the Lab to the Roads	3
<i>Ariel Rosenfeld, Oleg Maksimov, and Sarit Kraus</i>	
Incentive Compatibility of Pay Per Last N Shares in Bitcoin Mining Pools. . .	21
<i>Yevhen Zolotavkin, Julian Garcia, and Carsten Rudolph</i>	
Adaptivity in Network Interdiction	40
<i>Bastián Bahamondes, José Correa, Jannik Matuschke, and Gianpaolo Oriolo</i>	
Efficient Rational Proofs for Space Bounded Computations	53
<i>Matteo Campanelli and Rosario Gennaro</i>	
Game-Theoretical Analysis of PLC System Performance in the Presence of Jamming Attacks.	74
<i>Yun Ai, Manav R. Bhatnagar, Michael Cheffena, Aashish Mathur, and Artem Sedakov</i>	
Secure Sensor Design for Cyber-Physical Systems Against Advanced Persistent Threats	91
<i>Muhammed O. Sayin and Tamer Başar</i>	
An Ultimatum Game Model for the Evolution of Privacy in Jointly Managed Content	112
<i>Sarah Rajtmajer, Anna Squicciarini, Jose M. Such, Justin Semonsen, and Andrew Belmonte</i>	
The U.S. Vulnerabilities Equities Process: An Economic Perspective.	131
<i>Tristan Caulfield, Christos Ioannidis, and David Pym</i>	
A Stackelberg Game Model for Botnet Data Exfiltration	151
<i>Thanh Nguyen, Michael P. Wellman, and Satinder Singh</i>	
Optimal Strategies for Detecting Data Exfiltration by Internal and External Attackers.	171
<i>Karel Durkota, Viliam Lisý, Christopher Kiekintveld, Karel Horák, Branislav Božanský, and Tomáš Pevný</i>	
Building Real Stackelberg Security Games for Border Patrols.	193
<i>Victor Bucarey, Carlos Casorrán, Óscar Figueroa, Karla Rosas, Hugo Navarrete, and Fernando Ordóñez</i>	

Strategic Defense Against Deceptive Civilian GPS Spoofing of Unmanned Aerial Vehicles	213
<i>Tao Zhang and Quanyan Zhu</i>	
A Game Theoretical Model for Optimal Distribution of Network Security Resources	234
<i>Ziad Ismail, Christophe Kiennert, Jean Leneutre, and Lin Chen</i>	
Game-Theoretic Goal Recognition Models with Applications to Security Domains	256
<i>Samuel Ang, Hau Chan, Albert Xin Jiang, and William Yeoh</i>	
Manipulating Adversary’s Belief: A Dynamic Game Approach to Deception by Design for Proactive Network Security	273
<i>Karel Horák, Quanyan Zhu, and Branislav Bošanský</i>	
A Stochastic Game-Theoretic Model for Smart Grid Communication Networks	295
<i>Xiaobing He and Hermann de Meer</i>	
A Stackelberg Game and Markov Modeling of Moving Target Defense	315
<i>Xiaotao Feng, Zizhan Zheng, Prasant Mohapatra, and Derya Cansever</i>	
Proactive Defense Against Physical Denial of Service Attacks Using Poisson Signaling Games	336
<i>Jeffrey Pawlick and Quanyan Zhu</i>	
A Large-Scale Markov Game Approach to Dynamic Protection of Interdependent Infrastructure Networks	357
<i>Linan Huang, Juntao Chen, and Quanyan Zhu</i>	
VIOLA: Video Labeling Application for Security Domains	377
<i>Elizabeth Bondi, Fei Fang, Debarun Kar, Venil Noronha, Donnabell Dmello, Milind Tambe, Arvind Iyer, and Robert Hannaford</i>	
On the Economics of Ransomware	397
<i>Aron Laszka, Sadegh Farhang, and Jens Grossklags</i>	
Deterrence of Cyber Attackers in a Three-Player Behavioral Game	418
<i>Jinshu Cui, Heather Rosoff, and Richard S. John</i>	
Information Leakage Games	437
<i>Mário S. Alvim, Konstantinos Chatzikokolakis, Yusuke Kawamoto, and Catuscia Palamidessi</i>	

Optimal Patrol Planning for Green Security Games
with Black-Box Attackers 458
*Haifeng Xu, Benjamin Ford, Fei Fang, Bistra Dilkina,
Andrew Plumpton, Milind Tambe, Margaret Driciru, Fred Wanyama,
Aggrey Rwetsiba, Mustapha Nsubaga, and Joshua Mabonga*

Short Papers

Security Games with Probabilistic Constraints on the Agent’s Strategy 481
*Corine M. Laan, Ana Isabel Barros, Richard J. Boucherie,
and Herman Monsuur*

On the Cost of Game Playing: How to Control the Expenses
in Mixed Strategies 494
Stefan Rass, Sandra König, and Stefan Schauer

Dynamics of Strategic Protection Against Virus Propagation
in Heterogeneous Complex Networks 506
Yezekeael Hayel and Quanyan Zhu

Three Layer Game Theoretic Decision Framework
for Cyber-Investment and Cyber-Insurance 519
*Deepak K. Tosh, Iman Vakili, Sachin Shetty, Shamik Sengupta,
Charles A. Kamhoua, Laurent Njilla, and Kevin Kwiat*

Author Index 533



<http://www.springer.com/978-3-319-68710-0>

Decision and Game Theory for Security
8th International Conference, GameSec 2017, Vienna,
Austria, October 23-25, 2017, Proceedings
Rass, S.; An, B.; Kiekintveld, C.; Fang, F.; Schauer, S.
(Eds.)
2017, XI, 534 p. 137 illus., Softcover
ISBN: 978-3-319-68710-0