Record Nr. UNINA9910830652403321 Modeling and design of secure Internet of things / / edited by Charles **Titolo** A. Kamhoua, Laurent L. Njilla, Alexander Kott, Sachin Shetty Pubbl/distr/stampa Hoboken, New Jersey:,: Wiley-IEEE Press,, [2020] [Piscatagay, New Jersey]:,: IEEE Xplore,, [2020] **ISBN** 1-119-59339-5 1-119-59337-9 1-119-59338-7 Descrizione fisica 1 online resource (697 pages) Collana **IEEE** press 005.8 Disciplina Internet of things - Security measures Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. About the Editors ix -- List of Contributors xiii -- Foreword xix --Nota di contenuto Preface xxiii -- 1 Introduction 1 /Charles A. Kamhoua, Laurent L. Niilla, Alexander Kott, and Sachin Shetty -- Part I Game Theory for Cyber Deception 27 -- 2 Game-Theoretic Analysis of Cyber Deception: Evidence-Based Strategies and Dynamic Risk Mitigation 29 /Tao Zhang, Linan Huang, Jeffrey Pawlick, and Quanyan Zhu -- 3 A Hypergame-Based Defense Strategy Toward Cyber Deception in Internet of Battlefield Things (IoBT) 59 /Bowei Xi and Charles A. Kamhoua -- 4

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Sommario/riassunto

"Internet of Things (IoT) devices such as sensors, wearable devices, robots, drones, and autonomous vehicles facilitate the Intelligence, Surveillance, and Reconnaissance to Command and Control and battlefield services. There are several reasons for IoT security. First, IoT devices are mass produced rapidly to be low-cost commodity items without security protection in their original design. Second, IoT devices are highly dynamic, mobile, and heterogeneous without common standards. Third, it is imperative to understand the natural world, the physical process(es) under IoT control, and how these real-world processes can be compromised before recommending any relevant security countermeasure. As a result, those systems are the frequent targets of sophisticated cyber attacks that aim to disrupt mission effectiveness."--