1. Record Nr. UNINA9910488713403321 Autore Chen Xiaofeng Titolo Cyber security meets machine learning / / Xiaofeng Chen, Willy Susilo, Elisa Bertino Pubbl/distr/stampa Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-336-726-1 Descrizione fisica 1 online resource (168 pages) Disciplina 006.31 Soggetti Machine learning - Technique Machine learning - Security measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Intro -- Preface -- Contents -- IoT Attacks and Malware -- 1 Nota di contenuto Introduction -- 2 Background -- 2.1 Cybersecurity Kill Chains -- 2.2 Major IoT Security Concerns -- 3 Attack Classification -- 3.1 Passive/Information Stealing Attacks -- 3.2 Service Degradation Attacks -- 3.3 DDoS Attacks -- 4 IoT Malware Analysis and Classification -- 5 Al-Based IDS Solutions -- 6 Conclusion --References -- Machine Learning-Based Online Source Identification for Image Forensics -- 1 Introduction -- 2 Related Work -- 2.1 Features Engineering for Image Source Identification -- 2.2 Statistical Learning-Based Image Source Identification -- 3 Proposed Scheme: OSIU -- 3.1 Unknown Sample Triage -- 3.2 Unknown Image Discovery -- 3.3 (K+1) -class Classification -- 4 Experiments and Results -- 4.1 Dataset and Experiment Settings -- 4.2 Features -- 4.3 Evaluation Metrics -- 4.4 Performance of Triaging Unknown Samples -- 4.5 Performance of OSIU -- 5 Conclusion -- References -- Reinforcement Learning Based Communication Security for Unmanned Aerial Vehicles -- 1 Introduction -- 2 Communication Security for Unmanned Aerial Vehicles -- 2.1 UAV Communication Model -- 2.2 Attack Model -- 3 Reinforcement Learning Based UAV Communication Security -- 3.1

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