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Titolo	Automating open source intelligence : algorithms for OSINT // edited by Robert Layton, Paul A. Watters
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ISBN	0-12-802917-X
Descrizione fisica	1 online resource (212 pages) : illustrations, charts
Collana	Syngress advanced topics in information security
Soggetti	Open source intelligence Information technology - Social aspects Business intelligence - Computer network resources Intelligence service - Computer network resources Data mining Internet searching Computational intelligence
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	Chapter 1 - The Automating of Open Source Intelligence; The Commercial Angle; Algorithms; References; Chapter 2 - Named Entity Resolution in Social Media; Introduction; Evaluating Semantic Processing Performance; Characterizing Semantic Processing Errors; Meaning Loss in Biblical Proverbs: A Case Study; Models for Improving Semantic Processing Performance; Discussion; References; Chapter 3 - Relative Cyberattack Attribution; Introduction; Basic Attack Structure; Anonymization on the Internet; Weaknesses in Anonymization Attribution as a Concept; Absolute Attribution; Relative Attribution; Relative attribution concepts; Inherent versus Learnt Behaviors; Hiding Behavior; Consistency of Behavior; Relative Attribution Techniques; Authorship Analysis; Limitations and Issues; Research Streams; Conclusions; References; Chapter 4 - Enhancing Privacy to Defeat Open Source Intelligence; Introduction; Scenario; Requirements and Threats; Preliminaries; The PIEMCP; Formal Security Analysis with CPN; Attack Scenarios; Verification Results; Removing Trusted ARM; Performance

## Analysis of FSSO-PIEMC

Comparison to Existing ApproachConclusion and future work; References; Chapter 5 - Preventing Data Exfiltration: Corporate Patterns and Practices; What is Happening Around the World?; What is Happening in New Zealand?; Specifying the Problem; Problems Arising by Implementing Censorship; So, what should be done?; Summary; References; Chapter 6 - Gathering Intelligence on High-Risk Advertising and Film Piracy: A Study of the Digital Underground; Introduction; Advertising and risk; The digital millennium copyright act (DMCA); Chilling Effects Database; Google Transparency Report Mainstream advertising and how piracy is fundedHigh-Risk Advertising and their links to piracy websites; High-Risk Advertising: Case Studies in Canada; High-risk advertising: case studies in Australia; High-Risk Advertising: Case studies in New Zealand; Research Challenges; References; Chapter 7 - Graph Creation and Analysis for Linking Actors: Application to Social Data; Introduction; The Social Network Model; A Brief History of Graphs and Social Networks; Conceptual Framework; Graph Creation Techniques; Data Gathering; Defining and Computing Relationships; Disambiguation Techniques Graph Analysis for OSINTStructural Observations; Density of a Graph; Neighborhood, Degree, Average Degree, and Degree Distribution; Paths and Average Path Length; Components; Characterizing Position of Nodes; Betweenness Centrality; Closeness Centrality; Structures and Communities of Nodes; Structural Patterns: Cliques and Cores; Communities; Modularity; Twitter Case Study; The Twitter Dataset; General Graph Metrics; Node Metrics and Profiles' Centrality; Communities; Conclusion; References; Chapter 8 - Ethical Considerations When Using Online Datasets for Research Purposes; Introduction Existing Guidelines

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### Sommario/riassunto

Algorithms for Automating Open Source Intelligence (OSINT) presents information on the gathering of information and extraction of actionable intelligence from openly available sources, including news broadcasts, public repositories, and more recently, social media. As OSINT has applications in crime fighting, state-based intelligence, and social research, this book provides recent advances in text mining, web crawling, and other algorithms that have led to advances in methods that can largely automate this process. The book is beneficial to both practitioners and academic researchers, with discussions of the latest advances in applications, a coherent set of methods and processes for automating OSINT, and interdisciplinary perspectives on the key problems identified within each discipline. Drawing upon years of practical experience and using numerous examples, editors Robert Layton, Paul Watters, and a distinguished list of contributors discuss Evidence Accumulation Strategies for OSINT, Named Entity Resolution in Social Media, Analyzing Social Media Campaigns for Group Size Estimation, Surveys and qualitative techniques in OSINT, and Geospatial reasoning of open data. Presents a coherent set of methods and processes for automating OSINTFocuses on algorithms and applications allowing the practitioner to get up and running quicklyIncludes fully developed case studies on the digital underground and predicting crime through OSINTDiscusses the ethical considerations when using publicly available online data

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