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| Nota di contenuto | Part I Cybersecurity Concerns -- Use of Artificial Intelligence in a Cybersecurity Environment -- Petri Vähäkainu and Martti Lehto -- A Review of Cyber Threat (Artificial) Intelligence in Security -- Management -- Martin Lundgren and Ali Padyab -- Model Based Resilience Engineering for Design and Assessment of -- Mission Critical Systems Containing AI Components -- Automation of CybersecurityWork -- Artificial Intelligence for Cybersecurity Education and Training -- Offensive Machine Learning Methods and the Cyber Kill Chain -- Defensive Machine Learning Methods and the Cyber Defence Chain -- Part II Privacy and Ethics -- Differential Privacy: An Umbrella Review -- AI in Cyber Operations: Ethical and Legal Considerations for End-Users -- Part III Applications -- Android Malware Detection Using Deep Learning -- Artificial Intelligence Enabled Radio Signal Intelligence -- Deep Learning Quantile Regression for Robustness, |

Sommario/riassunto

This book discusses artificial intelligence (AI) and cybersecurity from multiple points of view. The diverse chapters reveal modern trends and challenges related to the use of artificial intelligence when considering privacy, cyber-attacks and defense as well as applications from malware detection to radio signal intelligence. The chapters are contributed by an international team of renown researchers and professionals in the field of AI and cybersecurity. During the last few decades the rise of modern AI solutions that surpass humans in specific tasks has occurred. Moreover, these new technologies provide new methods of automating cybersecurity tasks. In addition to the privacy, ethics and cybersecurity concerns, the readers learn several new cutting edge applications of AI technologies. Researchers working in AI and cybersecurity as well as advanced level students studying computer science and electrical engineering with a focus on AI and Cybersecurity will find this book useful as a reference. Professionals working within these related fields will also want to purchase this book as a reference.