1. Record Nr. UNISALENTO991001090259707536 **Autore** Stone, Marshall Harvey **Titolo** Linear transformations in Hilbert space and their applications to analysis / by Marshall Harvey Stone Pubbl/distr/stampa Providence: American Mathematical Society, 1932 Descrizione fisica viii, 622 p.; 23 cm Collana Colloquium publications, 0065-9258; 15 Classificazione AMS 46C AMS 47A Disciplina 515.7246 Soggetti Inner product spaces Linear operators Lingua di pubblicazione Inglese **Formato** Materiale a stampa

Monografia

Livello bibliografico

Record Nr. UNINA9910808454203321 Autore Schaathun Hans Georg Titolo Machine learning in image steganalysis / / Hans Georg Schaathun Pubbl/distr/stampa Hoboken,: Wiley, 2012 **ISBN** 9786613916372 9781283603928 1283603926 9781118437988 1118437985 9781118437964 1118437969 9781118437957 1118437950 Edizione [1st edition] Descrizione fisica 1 online resource (394 p.) Collana Wiley - IEEE Classificazione SCI067000 Disciplina 006.3/1 Soggetti Machine learning Wavelets (Mathematics) Data encryption (Computer science) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Matter -- Overview. Introduction -- Steganography and Steganalysis -- Getting Started with a Classifier -- Features. Histogram Analysis -- Bit-Plane Analysis -- More Spatial Domain Features -- The Wavelets Domain -- Steganalysis in the JPEG Domain -- Calibration Techniques -- Classifiers. Simulation and Evaluation -- Support Vector Machines -- Other Classification Algorithms -- Feature Selection and Evaluation -- The Steganalysis Problem -- Future of the Field --Bibliography -- Index. Sommario/riassunto Steganography is the art of communicating a secret message, hiding the very existence of a secret message. This is typically done by hiding the message within a non-sensitive document. Steganalysis is the art

and science of detecting such hidden messages. The task in steganalysis is to take an object (communication) and classify it as

either a steganogram or a clean document. Most recent solutions apply classification algorithms from machine learning and pattern recognition, which tackle problems too complex for analytical solution by teaching computers to learn from empirical data. Part 1of the book is an introduction to steganalysis as part of the wider trend of multimedia forensics, as well as a practical tutorial on machine learning in this context. Part 2 is a survey of a wide range of feature vectors proposed for steganalysis with performance tests and comparisons. Part 3 is an in-depth study of machine learning techniques and classifier algorithms, and presents a critical assessment of the experimental methodology and applications in steganalysis. Key features: . Serves as a tutorial on the topic of steganalysis with brief introductions to much of the basic theory provided, and also presents a survey of the latest research.. Develops and formalises the application of machine learning in steganalysis; with much of the understanding of machine learning to be gained from this book adaptable for future study of machine learning in other applications. . Contains Python programs and algorithms to allow the reader to modify and reproduce outcomes discussed in the book.. Includes companion software available from the author's website.