1. Record Nr. UNINA9910983081503321

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Titolo	A First Course in Statistical Learning : With Data Examples and Python Code / / by Johannes Lederer
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031302763 3031302761
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (298 pages)
Collana	Statistics and Computing, , 2197-1706
Disciplina	006.31
Soggetti	Machine learning Statistics - Computer programs Statistics Artificial intelligence - Data processing Statistical Learning Machine Learning Statistical Software Statistical Theory and Methods Applied Statistics Data Science Estadística Aprenentatge automàtic Mineria de dades Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Data -- Chapter 1: Fundamentals of Data -- Chapter 2: Exploratory Data Analysis -- Chapter 3: Unsupervised Learning -- Part II: Inferential Data Analyses -- Chapter 4: Linear Regression -- Chapter 5: Logistic Regression -- Chapter 6: Regularization -- Part III: Machine Learning -- Chapter 7: Support-Vector Machines -- Chapter 8: Deep Learning.
Sommario/riassunto	This textbook introduces the fundamental concepts and methods of

statistical learning. It uses Python and provides a unique approach by blending theory, data examples, software code, and exercises from beginning to end for a profound yet practical introduction to statistical learning. The book consists of three parts: The first one presents data in the framework of probability theory, exploratory data analysis, and unsupervised learning. The second part on inferential data analysis covers linear and logistic regression and regularization. The last part studies machine learning with a focus on support-vector machines and deep learning. Each chapter is based on a dataset, which can be downloaded from the book's homepage. In addition, the book has the following features: A careful selection of topics ensures rapid progress. An opening question at the beginning of each chapter leads the reader through the topic. Expositions are rigorous yet based on elementary mathematics. More than two hundred exercises help digest the material. A crisp discussion section at the end of each chapter summarizes the key concepts and highlights practical implications. Numerous suggestions for further reading guide the reader in finding additional information. This book is for everyone who wants to understand and apply concepts and methods of statistical learning. Typical readers are graduate and advanced undergraduate students in data-intensive fields such as computer science, biology, psychology, business, and engineering, and graduates preparing for their job interviews.

2. Record Nr. UNINA9910574095303321

Titolo	Implementation and Application of Automata : 26th International Conference, CIAA 2022, Rouen, France, June 28 – July 1, 2022, Proceedings / / edited by Pascal Caron, Ludovic Mignot
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-07469-6
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (258 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13266
Disciplina	004
Soggetti	Natural language processing (Computer science) Database management Software engineering Computer science Machine theory Logic programming Natural Language Processing (NLP) Database Management Software Engineering Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory Logic in AI
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	On 25 Years of CIAA Through the Lens of Data Science -- Manipulation of Regular Expressions Using Derivatives: an Overview -- How to Settle the ReDoS Problem: Back to the Classical Automata Theory -- Ordered Context-Free Grammars -- Symbolic Weighted Language Models, Quantitative Parsing and Automated Music Transcription -- A Similarity Measure for Formal Languages Based on Convergent Geometric Series -- Hybrid Tree Automata and the Yield Theorem for Constituent Tree Automata -- Some results concerning careful synchronization of partial automata and subset synchronization of DFA’s -- A Toolkit for Parikh

Matrices -- Syntax Checking Either Way -- On the Power of Pushing or Stationary Moves for Input-Driven Pushdown Automata -- The Cut Operation in Subclasses of Convex Languages (Extended Abstract) -- Variations of the Separating Words Problem -- Homomorphisms on graph-walking automata -- Nondeterministic State Complexity of Site-Directed Deletion -- Energy Complexity of Regular Language Recognition.-Real-Time, Constant-Space, Constant-Randomness Verifiers -- Constrained Synchronization for Monotonic, Solvable and Automata with Simple Idempotents -- An Ambiguity Hierarchy of Weighted Context-free Grammars.

Sommario/riassunto

This book constitutes the proceedings of the 26th International Conference on Implementation and Application of Automata, CIAA 2022, held in Rouen, France in June/ July 2022. The 16 regular papers presented together with 3 invited lectures in this book were carefully reviewed and selected from 26 submissions. The topics of the papers covering various fields in the application, implementation, and theory of automata and related structures.