1. Record Nr. UNISA996389180203316

Autore	Leybourn William <1626-1716.>
Titolo	The compleat surveyor [[electronic resource]] : containing the whole art of surveying the land by the plain table, circumferentor, theodolite, peractor, and other instruments : with divers kinds of mensurations and matters pertinent to a work of this nature : the whole treatise being comprised in VII books / / by William Leybourn
Pubbl/distr/stampa	London, : Printed by E. Flesher for George Sawbridge, 1679
Edizione	[The fourth edition, corrected and much enlarged, an account whereof is given in the preface to the reader.]
Descrizione fisica	[14], 438 [i.e. 370] p., [5] leaves of plates : ill
Soggetti	Surveying
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Reproduction of original in the Cambridge University Library.
Sommario/riassunto	eebo-0021

2. Record Nr. UNISA996499872203316

Autore	Unpingco Jose <1969->
Titolo	Python for Probability, Statistics, and Machine Learning [[electronic resource] /] / by José Unpingco
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783031046483 9783031046476
Edizione	[3rd ed. 2022.]
Descrizione fisica	1 online resource (524 pages)
Disciplina	006.31
Soggetti	Telecommunication Computer science - Mathematics Mathematical statistics Engineering mathematics Engineering - Data processing Statistics Data mining Communications Engineering, Networks Probability and Statistics in Computer Science Mathematical and Computational Engineering Applications Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Data Mining and Knowledge Discovery Python (Llenguatge de programació) Aprenentatge automàtic Probabilitats Processament de dades Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Part 1 Getting Started with Scientific Python -- Installation and Setup -- Numpy -- Matplotlib -- Ipython -- Jupyter Notebook -- Scipy -- Pandas -- Sympy -- Interfacing with Compiled

Libraries -- Integrated Development Environments -- Quick Guide to Performance and Parallel Programming -- Other Resources -- Part 2 Probability -- Introduction -- Projection Methods -- Conditional Expectation as Projection -- Conditional Expectation and Mean Squared Error -- Worked Examples of Conditional Expectation and Mean Square Error Optimization -- Useful Distributions -- Information Entropy -- Moment Generating Functions -- Monte Carlo Sampling Methods -- Useful Inequalities -- Part 3 Statistics -- Python Modules for Statistics -- Types of Convergence -- Estimation Using Maximum Likelihood -- Hypothesis Testing and P-Values -- Confidence Intervals -- Linear Regression -- Maximum A-Posteriori -- Robust Statistics -- Bootstrapping -- Gauss Markov -- Nonparametric Methods -- Survival Analysis -- Part 4 Machine Learning -- Introduction -- Python Machine Learning Modules -- Theory of Learning -- Decision Trees -- Boosting Trees -- Logistic Regression -- Generalized Linear Models -- Regularization -- Support Vector Machines -- Dimensionality Reduction -- Clustering -- Ensemble Methods -- Deep Learning -- Notation -- References -- Index.

Sommario/riassunto

Using a novel integration of mathematics and Python codes, this book illustrates the fundamental concepts that link probability, statistics, and machine learning, so that the reader can not only employ statistical and machine learning models using modern Python modules, but also understand their relative strengths and weaknesses. To clearly connect theoretical concepts to practical implementations, the author provides many worked-out examples along with "Programming Tips" that encourage the reader to write quality Python code. The entire text, including all the figures and numerical results, is reproducible using the Python codes provided, thus enabling readers to follow along by experimenting with the same code on their own computers. Modern Python modules like Pandas, Sympy, Scikit-learn, Statsmodels, Scipy, Xarray, Tensorflow, and Keras are used to implement and visualize important machine learning concepts like the bias/variance trade-off, cross-validation, interpretability, and regularization. Many abstract mathematical ideas, such as modes of convergence in probability, are explained and illustrated with concrete numerical examples. This book is suitable for anyone with undergraduate-level experience with probability, statistics, or machine learning and with rudimentary knowledge of Python programming. · Features a novel combination of modern Python implementations and underlying mathematics to illustrate and visualize the foundational ideas of probability, statistics, and machine learning; · Includes meticulously worked-out numerical examples, all reproducible using the Python code provided in the text, that compute and visualize statistical and machine learning models thus enabling the reader to not only implement these models but understand their inherent trade-offs; · Utilizes modern Python modules such as Statsmodels, Tensorflow, Keras, Sympy, and Scikit-learn, along with embedded "Programming Tips" to encourage readers to develop quality Python codes that implement and illustrate practical concepts.