1.	Record Nr.	UNINA9910739454703321
	Titolo	Time Series Algorithms Recipes : Implement Machine Learning and Deep Learning Techniques with Python / / by Akshay R Kulkarni, Adarsha Shivananda, Anoosh Kulkarni, V Adithya Krishnan
	Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2023
	ISBN	9781484289785 1484289781
	Edizione	[1st ed. 2023.]
	Descrizione fisica	1 online resource (188 pages)
	Disciplina	006.31
	Soggetti	Machine learning Artificial intelligence Python (Computer program language) Machine Learning Artificial Intelligence Python
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di contenuto	Chapter 1: Getting Started with Time Series -- Chapter 2: Statistical Univariate Modelling -- Chapter 3: Statistical Multivariate Modelling -- Chapter 4: Machine Learning Regression-Based Forecasting -- Chapter 5: Forecasting Using Deep Learning.
	Sommario/riassunto	This book teaches the practical implementation of various concepts for time series analysis and modeling with Python through problem-solution-style recipes, starting with data reading and preprocessing. It begins with the fundamentals of time series forecasting using statistical modeling methods like AR (autoregressive), MA (moving-average), ARMA (autoregressive moving-average), and ARIMA (autoregressive integrated moving-average). Next, you'll learn univariate and multivariate modeling using different open-sourced packages like Fbprophet, stats model, and sklearn. You'll also gain insight into classic machine learning-based regression models like randomForest, Xgboost, and LightGBM for forecasting problems. The book concludes by demonstrating the implementation of deep learning models (LSTMs

and ANN) for time series forecasting. Each chapter includes several code examples and illustrations. After finishing this book, you will have a foundational understanding of various concepts relating to time series and its implementation in Python. You will: Implement various techniques in time series analysis using Python. Utilize statistical modeling methods such as AR (autoregressive), MA (moving-average), ARMA (autoregressive moving-average) and ARIMA (autoregressive integrated moving-average) for time series forecasting Understand univariate and multivariate modeling for time series forecasting Forecast using machine learning and deep learning techniques such as GBM and LSTM (long short-term memory).