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Titolo	Text Analytics with Python : A Practitioner's Guide to Natural Language Processing / / by Dipanjan Sarkar
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ISBN	9781484243541 1484243544
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (688 pages)
Disciplina	005.133
Soggetti	Artificial intelligence Python (Computer program language) Big data Artificial Intelligence Python Big Data
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Natural Language Processing Basics -- Chapter 2: Python for Natural Language Processing -- Chapter 3: Processing and Understanding Text -- Chapter 4: Feature Engineering for Text Data -- Chapter 5: Text Classification -- Chapter 6: Text summarization and topic modeling -- Chapter 7: Text Clustering and Similarity analysis -- Chapter 8: Sentiment Analysis -- Chapter 9: Deep learning in NLP.
Sommario/riassunto	Leverage Natural Language Processing (NLP) in Python and learn how to set up your own robust environment for performing text analytics. The second edition of this book will show you how to use the latest state-of-the-art frameworks in NLP, coupled with Machine Learning and Deep Learning to solve real-world case studies leveraging the power of Python. This edition has gone through a major revamp introducing several major changes and new topics based on the recent trends in NLP. We have a dedicated chapter around Python for NLP covering fundamentals on how to work with strings and text data along with introducing the current state-of-the-art open-source frameworks in NLP. We have a dedicated chapter on feature engineering

representation methods for text data including both traditional statistical models and newer deep learning based embedding models. Techniques around parsing and processing text data have also been improved with some new methods. Considering popular NLP applications, for text classification, we also cover methods for tuning and improving our models. Text Summarization has gone through a major overhaul in the context of topic models where we showcase how to build, tune and interpret topic models in the context of an interest dataset on NIPS conference papers. Similarly, we cover text similarity techniques with a real-world example of movie recommenders. Sentiment Analysis is covered in-depth with both supervised and unsupervised techniques. We also cover both machine learning and deep learning models for supervised sentiment analysis. Semantic Analysis gets its own dedicated chapter where we also showcase how you can build your own Named Entity Recognition (NER) system from scratch. To conclude things, we also have a completely new chapter on the promised of Deep Learning for NLP where we also showcase a hands-on example on deep transfer learning. While the overall structure of the book remains the same, the entire code base, modules, and chapters will be updated to the latest Python 3.x release.

----- Also the key selling points •

Implementations are based on Python 3.x and state-of-the-art popular open source libraries in NLP • Covers Machine Learning and Deep Learning for Advanced Text Analytics and NLP • Showcases diverse NLP applications including Classification, Clustering, Similarity Recommenders, Topic Models, Sentiment and Semantic Analysis.
