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Note generali	Includes index.
Nota di contenuto	Chapter 1: Natural Language Processing and Artificial Intelligence Overview -- Chapter 2: Product360 - Sentiment and Emotion Detector -- Chapter 3: TED Talks Segmentation and Topics Extraction Using Machine Learning -- Chapter 4: Enhancing E-commerce Using an Advanced Search Engine and Recommendation System -- Chapter 5: Creating a Resume Parsing, Screening, and Shortlisting System -- Chapter 6: Creating an E-commerce Product Categorization Model Using Deep Learning -- Chapter 7: Predicting Duplicate Questions in Quora -- Chapter 8: Named Entity Recognition Using CRF and BERT -- Chapter 9: Building a Chatbot Using Transfer Learning -- Chapter 10: News Headline Summarization -- Chapter 11: Text Generation - Next Word Prediction -- Chapter 12: Conclusion and Future Trends.
Sommario/riassunto	Leverage machine learning and deep learning techniques to build fully-fledged natural language processing (NLP) projects. Projects throughout this book grow in complexity and showcase methodologies, optimizing tips, and tricks to solve various business problems. You will use modern Python libraries and algorithms to build end-to-end NLP projects. The book starts with an overview of natural language processing (NLP) and artificial intelligence to provide a quick refresher on algorithms. Next, it covers end-to-end NLP projects beginning with traditional algorithms and projects such as customer review sentiment and emotion detection, topic modeling, and document clustering. From

there, it delves into e-commerce related projects such as product categorization using the description of the product, a search engine to retrieve the relevant content, and a content-based recommendation system to enhance user experience. Moving forward, it explains how to build systems to find similar sentences using contextual embedding, summarizing huge documents using recurrent neural networks (RNN), automatic word suggestion using long short-term memory networks (LSTM), and how to build a chatbot using transfer learning. It concludes with an exploration of next-generation AI and algorithms in the research space. By the end of this book, you will have the knowledge needed to solve various business problems using NLP techniques. You will: Implement full-fledged intelligent NLP applications with Python Translate real-world business problem on text data with NLP techniques Leverage machine learning and deep learning techniques to perform smart language processing Gain hands-on experience implementing end-to-end search engine information retrieval, text summarization, chatbots, text generation, document clustering and product classification, and more.
