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Titolo	Introduction to Transformers for NLP : With the Hugging Face Library and Models to Solve Problems // by Shashank Mohan Jain
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ISBN	9781484288443 1484288440
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (169 pages)
Disciplina	006.35
Soggetti	Artificial intelligence Machine learning Python (Computer program language) Artificial intelligence - Data processing Artificial Intelligence Machine Learning Python Data Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1: Introduction to Language Models -- Chapter 2: Introduction to Transformers -- Chapter 3: BERT -- Chapter 4: Hugging Face -- Chapter 5: Tasks Using the Huggingface Library -- Chapter 6: Fine-Tuning Pre-Trained Models -- Appendix A: Vision Transformers.
Sommario/riassunto	Get a hands-on introduction to Transformer architecture using the Hugging Face library. This book explains how Transformers are changing the AI domain, particularly in the area of natural language processing. This book covers Transformer architecture and its relevance in natural language processing (NLP). It starts with an introduction to NLP and a progression of language models from n-grams to a Transformer-based architecture. Next, it offers some basic Transformers examples using the Google colab engine. Then, it introduces the Hugging Face ecosystem and the different libraries and models provided by it. Moving forward, it explains language models

such as Google BERT with some examples before providing a deep dive into Hugging Face API using different language models to address tasks such as sentence classification, sentiment analysis, summarization, and text generation. After completing Introduction to Transformers for NLP, you will understand Transformer concepts and be able to solve problems using the Hugging Face library. You will:

- Understand language models and their importance in NLP and NLU (Natural Language Understanding)
- Master Transformer architecture through practical examples
- Use the Hugging Face library in Transformer-based language models
- Create a simple code generator in Python based on Transformer architecture.
