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Autore	Norris Donald J
Titolo	Machine Learning with the Raspberry Pi : Experiments with Data and Computer Vision / / by Donald J. Norris
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2020
ISBN	9781484251744 1484251741
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (571 pages)
Collana	Technology in action
Disciplina	006.31
Soggetti	Computer input-output equipment Hardware and Maker
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Introduction to Machine Learning (ML) with the Raspberry Pi (RasPi) -- Chapter 2: Exploration of ML data models: Part 1 -- Chapter 3: Exploration of ML data models: Part 2 -- Chapter 4: Preparation for Deep Learning -- Chapter 5: Practical deep learning ANN demonstrations -- Chapter 6: CNN demonstrations -- Chapter 7: Predictions using ANNs and CNNs -- Chapter 8: Predictions using CNNs and MLPs for medical research -- Chapter 9: Reinforcement Learning. .
Sommario/riassunto	Using the Pi Camera and a Raspberry Pi board, expand and replicate interesting machine learning (ML) experiments. This book provides a solid overview of ML and a myriad of underlying topics to further explore. Non-technical discussions temper complex technical explanations to make the hottest and most complex topic in the hobbyist world of computing understandable and approachable. Machine learning, also commonly referred to as deep learning (DL), is currently being integrated into a multitude of commercial products as well as widely being used in industrial, medical, and military applications. It is hard to find any modern human activity, which has not been "touched" by artificial intelligence (AI) applications. Building on the concepts first presented in Beginning Artificial Intelligence with the Raspberry Pi, you'll go beyond simply understanding the concepts of AI into working with real machine learning experiments and applying practical deep learning concepts to experiments with the Pi board and

computer vision. What you learn with Machine Learning with the Raspberry Pi can then be moved on to other platforms to go even further in the world of AI and ML to better your hobbyist or commercial projects.

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