1. Record Nr. UNINA9910483166903321

Titolo	Programming with TensorFlow : solution for edge computing applications / / Kolla Bhanu Prakash, G. R. Kanagachidambaresan, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
ISBN	3-030-57077-0
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (X, 190 p.)
Collana	EAI/Springer Innovations in Communication and Computing
Disciplina	006.32
Soggetti	Neural networks (Computer science) Machine learning TensorFlow
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Installation Guide to Tensorflow -- Hello Tensorflow Program -- Representation of Vector -- Session with Tensorflow -- Matrix elementary operation -- Variable and constant -- Simple mathematical operation -- Matrix -- Variable Concept & Implementation -- Placeholder Concept & Implementation -- Equation with Tensor -- Matplot -- Regression Model -- Neural Network -- Convolutional Neural Network -- Recurrent Neural Network -- Application of Machine Learning & Deep Learning -- Implementing Chatbots -- Working with Text and Sequences + TensorBoard visualization -- TensorFlow Autoencoders -- Advanced TensorFlow Programming -- Reinforcement Learning -- RNN & LSTM using Keras -- Deep Learning with Pytorch -- Conclusion.
Sommario/riassunto	This practical book provides an end-to-end guide to TensorFlow, the leading open source software library that helps you build and train neural networks for deep learning, Natural Language Processing (NLP), speech recognition, and general predictive analytics. The book provides a hands-on approach to TensorFlow fundamentals for a broad technical audience—from data scientists and engineers to students and researchers. The authors begin by working through some basic

examples in TensorFlow before diving deeper into topics such as CNN, RNN, LSTM, and GNN. The book is written for those who want to build powerful, robust, and accurate predictive models with the power of TensorFlow, combined with other open source Python libraries. The authors demonstrate TensorFlow projects on Single Board Computers (SBCs). Provides a practical end-to-end guide to TensorFlow, the leading open source software library for building and training neural networks; Pertains to a broad technical audience—from data scientists and engineers to students and researchers; Shows how to implement advanced techniques in deep learning and explore deep neural networks and layers of data abstraction.