Record Nr. UNINA9910337625903321 Autore Rebala Gopinath Titolo An Introduction to Machine Learning / / by Gopinath Rebala, Ajay Ravi, Sanjay Churiwala Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-15729-6 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (275 pages) 006.31 Disciplina Soggetti Electronic circuits Artificial intelligence Computational intelligence Circuits and Systems Artificial Intelligence Computational Intelligence Inglese Lingua di pubblicazione **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Basics before Machine Learning -- Learning Models --Regression -- Improving Further -- Classification -- Clustering (unsupervised Learning) -- Random Forests -- Testing the Algorithm and the Network -- Neural Network -- Reinforcement Learning -- Deep Learning -- Principal Component Analysis -- Anomaly Detection --Recommender System -- Feature Search/Convolution -- Natural Language Processing -- Language Translation -- AlphaGo -- Data Quality -- System Improvement -- Software stack -- Hardware Implementations. . Sommario/riassunto Just like electricity, Machine Learning will revolutionize our life in many ways - some of which are not even conceivable today. This book provides a thorough conceptual understanding of Machine Learning techniques and algorithms. Many of the mathematical concepts are

explained in an intuitive manner. The book starts with an overview of machine learning and the underlying Mathematical and Statistical concepts before moving onto machine learning topics. It gradually builds up the depth, covering many of the present day machine

learning algorithms, ending in Deep Learning and Reinforcement Learning algorithms. The book also covers some of the popular Machine Learning applications. The material in this book is agnostic to any specific programming language or hardware so that readers can try these concepts on whichever platforms they are already familiar with. Offers a comprehensive introduction to Machine Learning, while not assuming any prior knowledge of the topic; Provides a complete overview of available techniques and algorithms in conceptual terms, covering various application domains of machine learning; Not tied to any specific software language or hardware implementation.