1. Record Nr. UNINA9910349394803321 Understanding and Interpreting Machine Learning in Medical Image **Titolo** Computing Applications: First International Workshops, MLCN 2018. DLF 2018, and iMIMIC 2018, Held in Conjunction with MICCAI 2018, Granada, Spain, September 16-20, 2018, Proceedings / / edited by Danail Stovanov, Zeike Taylor, Seved Mostafa Kia, Ipek Oguz, Mauricio Reves, Anne Martel, Lena Maier-Hein, Andre F. Marguand, Edouard Duchesnay, Tommy Löfstedt, Bennett Landman, M. Jorge Cardoso, Carlos A. Silva, Sergio Pereira, Raphael Meier Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-030-02628-0 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XVI, 149 p. 60 illus.) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 11038 Disciplina 616.07540285 616.0757 Soggetti Optical data processing Artificial intelligence Mathematical logic Numerical analysis Health informatics **Bioinformatics** Image Processing and Computer Vision Artificial Intelligence Mathematical Logic and Formal Languages **Numeric Computing**

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Sommario/riassunto This book constitutes the refereed joint proceedings of the First

Computational Biology/Bioinformatics

Health Informatics

International Workshop on Machine Learning in Clinical Neuroimaging, MLCN 2018, the First International Workshop on Deep Learning Fails. DLF 2018, and the First International Workshop on Interpretability of Machine Intelligence in Medical Image Computing, iMIMIC 2018, held in conjunction with the 21st International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2018, in Granada, Spain, in September 2018. The 4 full MLCN papers, the 6 full DLF papers, and the 6 full iMIMIC papers included in this volume were carefully reviewed and selected. The MLCN contributions develop state-of-the-art machine learning methods such as spatio-temporal Gaussian process analysis, stochastic variational inference, and deep learning for applications in Alzheimer's disease diagnosis and multi-site neuroimaging data analysis; the DLF papers evaluate the strengths and weaknesses of DL and identify the main challenges in the current state of the art and future directions; the iMIMIC papers cover a large range of topics in the field of interpretability of machine learning in the context of medical image analysis. .