1. Record Nr. UNINA9910373912203321

Titolo	ISBI 2019 C-NMC Challenge: Classification in Cancer Cell Imaging : Select Proceedings / / edited by Anubha Gupta, Ritu Gupta
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-15-0798-8
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (150 pages)
Collana	Lecture Notes in Bioengineering, , 2195-271X
Disciplina	616.99407
Soggetti	Cancer - Research Biomedical engineering Signal processing Image processing Speech processing systems Optical data processing Cancer Research Biomedical Engineering and Bioengineering Signal, Image and Speech Processing Computer Imaging, Vision, Pattern Recognition and Graphics Cèl·lules canceroses Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Classication of Normal Versus Malignant Cells in B-ALL White Blood Cancer Microscopic Images -- Chapter 2: Classication of Leukemic B-Lymphoblast Cells from Blood Smear Microscopic Images with an Attention-Based Deep Learning Method and Advanced Augmentation Techniques -- Chapter 3: .
Sommario/riassunto	This book comprises select peer-reviewed proceedings of the medical challenge - C-NMC challenge: Classification of normal versus malignant cells in B-ALL white blood cancer microscopic images. The challenge was run as part of the IEEE International Symposium on Biomedical Imaging (IEEE ISBI) 2019 held at Venice, Italy in April 2019. Cell classification via image processing has recently gained interest

from the point of view of building computer-assisted diagnostic tools for blood disorders such as leukaemia. In order to arrive at a conclusive decision on disease diagnosis and degree of progression, it is very important to identify malignant cells with high accuracy. Computer-assisted tools can be very helpful in automating the process of cell segmentation and identification because morphologically both cell types appear similar. This particular challenge was run on a curated data set of more than 14000 cell images of very high quality. More than 200 international teams participated in the challenge. This book covers various solutions using machine learning and deep learning approaches. The book will prove useful for academics, researchers, and professionals interested in building low-cost automated diagnostic tools for cancer diagnosis and treatment.