

1. Record Nr.	UNINA9910595023903321
Titolo	Computational Mathematics Modeling in Cancer Analysis : First International Workshop, CMMCA 2022, Held in Conjunction with MICCAI 2022, Singapore, September 18, 2022, Proceedings // edited by Wenjian Qin, Nazar Zaki, Fa Zhang, Jia Wu, Fan Yang
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2022
ISBN	3-031-17266-3
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (171 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13574
Disciplina	636.80896994 616.99400113
Soggetti	Image processing - Digital techniques Computer vision Computer engineering Computer networks Machine learning Computers Computer Imaging, Vision, Pattern Recognition and Graphics Computer Engineering and Networks Machine Learning Computing Milieux
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cellular Architecture on Whole Slide Images Allows the Prediction of Survival in Lung Adenocarcinoma -- Is More Always Better? Effects of Patch Sampling in Distinguishing Chronic Lymphocytic Leukemia from Transformation to Diffuse Large B-cell Lymphoma -- Repeatability of Radiomic Features against Simulated Scanning Position Stochasticity across Imaging Modalities and Cancer Subtypes: A Retrospective Multi-Institutional Study on Head-and-Neck Cases -- MLCN: Metric Learning Constrained Network for Whole Slide Image Classification with Bilinear Gated Attention Mechanism -- NucDETR: End-to-End Transformer for Nucleus Detection in Histopathology Images -- Self-supervised

learning based on a pre-trained method for the subtype classification of spinal tumors -- CanDLE: Illuminating Biases in Transcriptomic Pan-Cancer Diagnosis -- Cross-Stream Interactions: Segmentation of Lung Adenocarcinoma Growth Patterns -- Modality-collaborative AI model Ensemble for Lung Cancer Early Diagnosis -- Clustering-based Multi-instance Learning Network for Whole Slide Image Classification -- Multi-task Learning-driven Volume and Slice Level Contrastive Learning for 3D Medical Image Classification -- Light Annotation Fine Segmentation: Histology Image Segmentation based on VGG Fusion with Global Normalisation CAM -- Tubular Structure-Aware Convolutional Neural Networks for Organ at Risks Segmentation in Cervical Cancer Radiotherapy -- Automatic Computer-aided Histopathologic Segmentation for Nasopharyngeal Carcinoma using Transformer Framework -- Accurate Breast Tumor Identification Using Computational Ultrasound Image Features.

---

### Sommario/riassunto

This book constitutes the proceedings of the First Workshop on Computational Mathematics Modeling in Cancer Analysis (CMMCA2022), held in conjunction with MICCAI 2022, in Singapore in September 2022. Due to the COVID-19 pandemic restrictions, the CMMCA2022 was held virtually. DALI 2022 accepted 15 papers from the 16 submissions that were reviewed. A major focus of CMMCA2022 is to identify new cutting-edge techniques and their applications in cancer data analysis in response to trends and challenges in theoretical, computational and applied aspects of mathematics in cancer data analysis.

---