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Nota di contenuto	1) Introduction -- 2) CNN for Brain Tumor classification -- 3) CNN for Pneumonia image classification -- 4) CNN for White Blood Cell classification -- 5) CNN for Skin Cancer classification -- 6) CNN for Diabetic Retinopathy detection.
Sommario/riassunto	Convolutional Neural Networks for Medical Applications consists of research investigated by the author, containing state-of-the-art knowledge, authored by Dr Teoh Teik Toe, in applying Convolutional Neural Networks (CNNs) to the medical imagery domain. This book will expose researchers to various applications and techniques applied with deep learning on medical images, as well as unique techniques to

enhance the performance of these networks.Through the various chapters and topics covered, this book provides knowledge about the fundamentals of deep learning to a common reader while allowing a research scholar to identify some futuristic problem areas. The topics covered include brain tumor classification, pneumonia image classification, white blood cell classification, skin cancer classification and diabetic retinopathy detection. The first chapter will begin by introducing various topics used in training CNNs to help readers with common concepts covered across the book. Each chapter begins by providing information about the disease, its implications to the affected and how the use of CNNs can help to tackle issues faced in healthcare. Readers would be exposed to various performance enhancement techniques, which have been tried and tested successfully, such as specific data augmentations and image processing techniques utilized to improve the accuracy of the models.