

1. Record Nr.	UNINA9910502588803321
Titolo	Artificial Intelligence in Ophthalmology // edited by Andrzej Grzybowski
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-78601-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (280 pages)
Collana	Medicine Series
Disciplina	617.700285
Soggetti	Ophthalmology Artificial intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Artificial intelligence in Medicine -- Artificial intelligence in AMD -- Artificial intelligence in Glaucoma -- Artificial intelligence in Retinopathy of Prematurity -- Artificial intelligence in Diabetic Retinopathy Screening -- The overview of available artificial intelligence systems in Ophthalmology -- The overview of experimental artificial intelligence systems in Ophthalmology -- Technical aspects of deep learning in Ophthalmology -- Deep learning systems for retinal diseases -- Google DeepMind -- Singapore algorithm -- Johns Hopkins algorithm -- Perspectives of artificial intelligence in Ophthalmology -- Limitations of artificial intelligence in Ophthalmology -- Artificial intelligence in calculating the IOL power. .
Sommario/riassunto	This book provides a wide-ranging overview of artificial intelligence (AI), machine learning (ML) and deep learning (DL) algorithms in ophthalmology. Expertly written chapters examine AI in age-related macular degeneration, glaucoma, retinopathy of prematurity and diabetic retinopathy screening. AI perspectives, systems and limitations are all carefully assessed throughout the book as well as the technical aspects of DL systems for retinal diseases including the application of Google DeepMind, the Singapore algorithm, and the Johns Hopkins algorithm. Artificial Intelligence in Ophthalmology meets the need for a resource that reviews the benefits and pitfalls of AI, ML and DL in

ophthalmology. Ophthalmologists, optometrists, eye-care workers, neurologists, cardiologists, internal medicine specialists, AI engineers and IT specialists with an interest in how AI can help with early diagnosis and monitoring treatment in ophthalmic patients will find this book to be an indispensable guide to an evolving area of healthcare technology.
