

Special Issue

Artificial Intelligence Applications in Ophthalmology

Message from the Guest Editors

Artificial intelligence (AI) applications in ophthalmology have emerged as transformative tools, reshaping various facets of eye care. Leveraging AI's capacity to analyze extensive datasets and interpret the intricate imaging, automated diagnosis and early detection of ocular diseases, including diabetic retinopathy and glaucoma, has become more precise. Machine learning algorithms exhibit exceptional accuracy in image analysis, facilitating swift and accurate diagnoses by clinicians. Furthermore, predictive modeling enhances prognosis and contributes to personalized treatment plans. The integration of AI not only streamlines clinical workflows and enhances efficiency, but also holds the promise in broadening access to eye care, especially in remote or underserved regions. Despite these promising advancements, numerous challenges and ethical concerns must be addressed before the safe deployment of AI in ophthalmic care. This Special Issue is dedicated to exploring advancements in the realm of AI applications within ophthalmology. We invite contributions that illustrate the diverse ways in which AI can positively impact various facets of eye care.

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