



## Modelling of Human Visual System in Image Processing

Guest Editors:

**Dr. Alexey Mashtakov**

Program Systems Institute,  
Russian Academy of Sciences,  
Pereslavl-Zalessky, 119991  
Moscow, Russia

**Prof. Dr. Edoardo Provenzi**

IMB Institute de Mathématiques  
de Bordeaux UMR 5251,  
Université de Bordeaux, 351,  
cours de la Libération, 33405  
Talence, France

Deadline for manuscript  
submissions:

**closed (24 May 2024)**

### Message from the Guest Editors

Dear Colleagues,

Understanding the human body's functioning and, in particular, the work of brain neurons is an urgent problem. The development and analysis of mathematical models of some aspects of brain functioning are important in extending our knowledge. This Special Issue is dedicated to the mathematical modeling of human vision and its applications to problems of image processing, such as image segmentation, enhancement, and inpainting. The scope of the Special Issue is to expose some modern mathematical models of the processes involved in the perception of visual information by the human brain and to discuss the brain-inspired methods in image processing, which are based on these models.

Dr. Alexey Mashtakov

Prof. Dr. Edoardo Provenzi

*Guest Editors*





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Raimondo Schettini

Department of Informatics,  
Systems and Communication,  
University of Milano-Bicocca,  
viale Sarca, 336, 20126 Milan, Italy

## Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

## Author Benefits

**Open Access:**— free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, ESCI (Web of Science), PubMed, PMC, dblp, Inspec, Ei Compindex, and other databases.

**Journal Rank:** CiteScore - Q1 (Computer Graphics and Computer-Aided Design)

## Contact Us

---

*Journal of Imaging* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/jimaging  
jimaging@mdpi.com  
X@J\_Imaging\_MDPI