



## **Advances in Mathematical Methods for Machine Learning Algorithms for Computer Aided Diagnostic Systems**

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### **Message from the Guest Editors**

Computer-aided diagnosis (CAD) systems have gained a great deal of attention in recent years. Medical-imaging-based CAD systems are most commonly in use to help physicians. These systems can help to extract regions of interest from any imaging modality and can identify different diseases, like brain tumors, Alzheimer's disease, Parkinson's disease, lung nodules, cerebral microbleeds, and many more. These systems can be used to detect the above-mentioned diseases at an early stage for better and effective treatment. This makes these systems more critical and requires more reliable and accurate diagnosis. Machine learning algorithms have recently seen wide use in CAD systems. The advances in machine learning algorithms have proved helpful to improve the performance of CAD systems. In this way, this Special Issue focuses on the use of current advances in machine learning for medical imaging modalities. This Special Issue provides a platform for researchers from academia and industry to present their novel and unpublished work in the domain of medical imaging. This will help to foster future research in emerging fields of medical imaging and its related fields.





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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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