Special Issue

Interpretable Models and Their Applications in Neural Computation and Statistical Learning

Message from the Guest Editor

Neural networks and machine learning models have recently developed very fast and achieved the best results for many practical applications in AI and related fields. This has strongly limited their application and developments. Therefore, model interpretability analysis, as well as interpretable model design in neural computation and statistical learning, has become important and necessary. It is clear that model interpretability can be discovered by mathematical analysis under a statistical or probability framework. On the other hand, the data should be assumed to be generated from a probability model. Moreover, model interpretability should focus on a certain kind of practical problem for data analysis and mining. The aim of this Special Issue is to publish original research articles covering advances in model interpretability and interpretable models in neural computation and statistical learning. Potential topics include but are not limited to the following: interpretable deep learning models; Gaussian processes and their mixtures; curve clustering analysis and prediction; and automated model selection.

Guest Editor

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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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