Special Issue

Artificial Intelligence for COVID-19 Diagnosis

Message from the Guest Editors

Recognizing COVID-19 could be very difficult and present obstacles, due in part to the possible inconsistency of different exams and a lack of the clinical expertise needed to interpret diagnostic results, in addition to the huge volume of cases requiring treatment in the shortest time possible. The management of COVID-19 should comprise data combination. Hence, there is a need for software tools aimed at assisting in the detection, diagnosis and treatment of pathologies based on radiological image analysis. Artificial intelligence techniques, formal methods, statistical analysis and other techniques are currently being used for this purpose. An important aspect of a method is a capacity to explain the "reasoning" that has taken place to arrive at the results. In scientific research, the use of automated decision processes should require an explanation to ensure trust. the acceptance of results and the progress of research. Keywords

- Radiomics
- Artificial intelligence
- Machine learning
- Data analytics
- Image processing
- Deep learning
- Formal methods
- Explainability

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