

## Special Issue

# Deep Learning for Pathology Detection and Diagnosis in Medical Imaging

### Message from the Guest Editors

Severe pathologies, such as diffuse liver diseases or tumors, can lead to significant *degradation*, and sometimes lethal stages, of human health. The most reliable method for the diagnosis of these affections is usually the classical biopsy, which is invasive and dangerous, as it could generate infections and/or the spread of the malignant tumors through the human body. Advanced computerized methods are urgently needed to reduce invasiveness and enhance the information derived from medical images as much as possible by unveiling their subtle aspects. Computer vision and Machine learning can be successfully employed to achieve this target. Thus, advanced image analysis combined with conventional machine learning, as well as deep learning techniques, can lead to a highly accurate automatic diagnosis process. The corresponding features, segmentation, and 3D reconstruction techniques, as well as the fusion of multiple image modalities, can be involved in the achievement of appropriate 2D and 3D models for the considered affections, which are helpful in computer-aided diagnosis and surgery.

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## Sensors

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