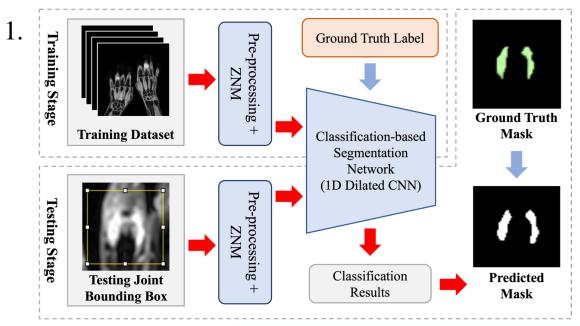
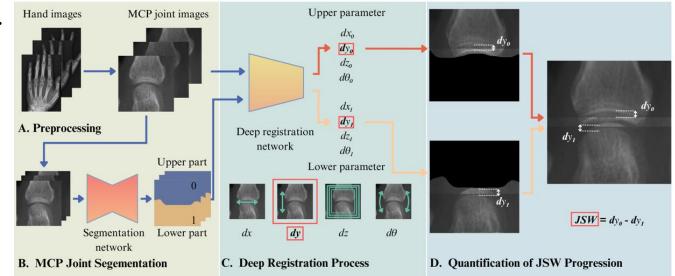
Deep Learning-Based Automated Quantitative Analysis and Clinical Application of Synovitis and Joint Space Changes in Rheumatoid Arthritis



• DL-based DCE-MRI TIC shape analysis has the potential for automatic segmentation and quantification of enhanced synovium in the hands of RA patients. This method is more objective and might significantly reduce the workload of radiologists, thus optimizing the management of patients with RA.



• A deep learning-based registration technique effectively quantified subtle joint space width changes on X-rays in RA patients, supporting its potential as a noninvasive tool for monitoring RA progression.



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