ID de Contribution: **39** Type: **Non spécifié**

A review of unsupervised anomaly detection models for neuroimaging applications

jeudi 7 mars 2024 09:30 (45 minutes)

Statistical machine learning models have becoming state-of-the-art methods in almost all medical imaging applications, including the segmentation of organs or structures of interest and the detections of pathological patterns. Among data-driven methods, fully supervised models remain the most common and performing ones. However, gathering numerous expert-annotated data to train such models is a time- and resources-intensive consuming process, limiting the size of available databases. Unsupervised Anomaly Detection, also referred to as outlier detection, has been proposed as an alternative to deep supervised learning for medical image analysis when the studied pathology is either rare or with heterogeneous patterns as well as when getting labels from radiologists is very challenging. This presentation will review the state of the art in this field focusing on neuroimaging applications.

Orateur: Dr LARTIZIEN, Carole (CREATIS laboratory)

Classification de Session: Invited