

Breast lesion quantification and characterization from Contrast Enhanced Ultrasound Imaging data

Giorgos Ioannidis

Abstract: Contrast Enhanced Ultrasound (CEUS) imaging has been established as a valuable modality for a number of pathologies. Perfusion quantification with CEUS is a challenging and expensive task and thus has not been fully integrated into everyday clinical practice. This work aims to present a complete computational framework for the quantification of the perfusion signal alongside with a machine learning pipe-line focusing on accurate differentiation benign and malignant breast lesions.