

Title:

Automated Prominent Nucleoli Detection

Abstract:

Nucleolar changes in cancer cells are one of the cytologic features important to the tumor pathologist in cancer assessments of tissue biopsies. However, inter-observer variability and the large image data hamper the efficiency and accuracy of assessment by pathologists. We propose a computational method for prominent nucleoli pattern detection. We approach this problem using massively parallelized machine learning and feature extraction methodologies. Our method is based on a farm of cascades of classifiers similar in design to those used in face detection.