

Ovary ultrasound image edge detection analysis: A tutorial using MATLAB

Abstract

Ultrasound imaging has been used over several years and has an excellent safety record. The problem of edge detection is fundamental to many image processing systems. Besides that, the existing of the sparkle noise creates difficulties in a diagnosis image captured by the ultrasound modality. The purpose of this study is to overcome the boundary problem by using several methods in image processing. The methods include image segmentation, morphological technique and image filtering. The ovary image captured from the ultrasound modality is used in this study. The results show that, by combining the region of interest method with threshold and morphological method, the edges and the border of the ovary can be detected.