## **ABSTRACT**

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BREAST CANCER MAMMOGRAM IMAGE SEGMENTATION USING REGION GROWING METHOD.

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(10+45 + appendix)

Breast cancer is one of the oldest cancer in humans and ranks second in women after cervical cancer. The number of breast cancer patients in Indo-nesia (28.7%) based on Hospital Information System (SIRS). A mammogram is a special x rays using an X-ray dose low. The abnormality of breast cancer can be identified by the presence or existence microclassification mass on the mammogram image. Computer-Aided Diagnosis (CAD) is developed to enhance the primary detection of this disease. The process of the CAD sys-tem include preprocessing, detection and segmentation, feature extraction, and classification[19]. Image segmentation aims to divide the image into a number of regions or objects for image analysis with the aim change the representation of an image into something more meaningful and easily ana-lyzed.

Segmentation in mammography which aims to separate the truly mass and which are not mass using the method Region Growing, segmenting the image that started with some seed (pixels) and region-represented in diffe-rent image regions and grow throughout the image[1]. Mammogram image segmentation on breast cancer patients with Region Growing method succes-sfully demonstrated areas of suspected mass (ROI) and are not mass. The study of the application for segmenting breast cancer successfully built using the software Matlab 2012a.

Bibliography (2006-2014)