## Implementasi Active Shape Model Untuk Segmentasi Citra Pindai Tulang

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## **Abstract**

Image segmentation is a very important process to get a pattern from the image, so that further segmentation results can be developed to recognize patterns then divide the image into several regions or for the classification process. In this study, image segmentation was performed from the results of bone scan and aimed to define the image of bone scan into several parts. Segmentation from the results of bone scan can be the basis of reference for analysis or diagnostics. For research purposes, the image is divided into 4 (four) defined parts, namely the head and spine, upper arms and collarbone, chest, and pelvis and upper thighs. The model is built using Constrained Local Model, then the process of fitting (fitting) using the Active Shape Model optimization algorithm. The process of fitting produces an average value of final error of 3-fold-cross-validation of 0.0446.

Keywords: Segmentation, Bonescan, Active Shape Model, Constrained Local Model.