ABSTRACT

Colon Cancer is Cancer can be affects humans. Because Increasing age every human being and processing should not be. for example, irregular eating and do not defecate for a long time. But did not rule out colon cancer can strike early. Now check a colon cancer are still using manual. By looking directly at the microscope and cells compared with normal colon cells. Demands paramedics to quickly diagnose colon cancer with highly accurate expected a lot of people.

This final assignment, will be constructed a classification system using Grey Level Co-occurrence Matrix (GLCM) with methods Levenberg-Marquardt Algorithm (LMA).

This final assignment, observed associated with the LMA, which includes the number of inputs, epochs, learning rate, and the number of hidden neurons. classification of colon cancer itself in terms of preprocessing to characterize the texture of cells in colon. Were taken using a digital camera, that directly confronted the ocular lens of the microscope In Hasan Sadikin bandung hospital. Using characteristic extraction stattistik Grey Level Co-occurrence Matrix (GLCM), which will continue processing training using Levenberg-Marquardt Algorithm (LMA). obtained results of 83% for intact tissue images colon cancer and 90% accuracy values for the image that already in the crop each cell.

Keywords: colon cancer classification, artificial neural network, Grey Level Co-occurrence Matrix, Levenberg Marquardt algorithm.