

## **Abstract**

Image is representing a component of multimedia that has an important role as visual information. But image often contaminated by noise in distribution during transmission process degrading quality image. Impulsive noise is a specific type of noise, which causes alteration of the pixels in the images so that their gray values do not exhibit compatibility with their local neighborhood.

Adaptive Neuro Fuzzy Inference System (ANFIS) represent the method which can be used in finishing complex non linier equation. On the basis of this is hence ANFIS applied in restoration method by using spatial position data and gray level of uncorrupt pixels that so can determine the output gray value function of corrupt pixels.

ANFIS implementation in restoration simulation yield gray value noise pixel formed becomes image restored. Examination conducted to know the performance by doing measurement objectively and subjectively.

**Keywords:** Adaptive neuro fuzzy inference system (ANFIS), noise detection, noise pixel, impulsive noise (IN), nearest neighborhood uncorrupted pixel.