

Abstract

The lake is a hollow shaped waters surrounded by land both naturally and artificially formed. Lake has many functions that can be done or utilized by humans. But this utilization by humans sometimes makes lake water polluted, so the lake water needs to be maintained. In this research, a lake water quality mapping will be made to find out whether the lake water quality is good or not. This lake water quality map was created using spatial interpolation based on a mobile sensor node. The spatial interpolation method used is the Inverse Distance Weighted (IDW) method. The results of the interpolation process will be visualized using the Google Map API. Where the interpolation results obtained will be in the form of a heatmap map with a map display in the form of color gradations for each parameter in accordance with the measured water quality.

Kata kunci : *spatial interpolation*, IDW, lake, Google Map API