Abstract

House is a place for humans to live and also a main necessity for humans. For years, the need for houses is increasing and varied so that it affects the selling price of the house. Therefore more research is needed to learn about the selling price of houses. This research is only focusing on house price segmentation in DKI Jakarta using the Gaussian Mixture Model-Based Clustering Method with the Expectation-Maximization algorithm. The goal of this research is to make a house price segmentation model so that we can obtain useful information for the potential buyer. Clustering with GMM utilize the log-likelihood function to optimize the GMM parameters. The result of this research is houses in DKI Jakarta can be segmented into 3 different clusters. The first cluster is for the low-profile houses. The second cluster is for the mid-profile houses. The third cluster is for the high-profile houses. The silhouette score that was produced by the clustering method is 0,60866 meaning that this score is quite good because it's close to a value of 1.

Keywords: segmentation, *clustering*, Gaussian Mixture Model