

The paper explores a hierarchical approach to model based clustering of grouped data. In trying to capture the latent structure in the data assigned to each group, and to infer the number of clusters within each group is our goal. The authors define the HDP in terms of the infinite limit of mixture models. The inference is done with the chinese restaurant franchise representation, the restaurant franchise and a sample from the global measure, and the third uses a direct assignment of data items to mixture components. The approach is applied to document modeling with multiple corpora. The inference is also performed on the Alice in Wonderland dataset for predicting strings of letters in sentences taken from Alice in Wonderland.