Creating Customer Segments

Project Rubric

Overview:

This rubric is here to help you understand the specifications for how your project will be evaluated. It is the same rubric you should share with others who give you feedback. You should look at the rubric before you begin working on this project and before you submit it.

Before you begin:

1. Read the project instructions carefully.

Before you submit:

1. Read the rubric below in detail and do your best to evaluate where your project stands.
2. If you think your project does not meet specifications for any criterion, make necessary changes so that it “meets specifications”.
3. When you are confident that your project meets or exceeds specifications in each criterion, share it with others for feedback

The Rubric:

Criteria	Meets Specifications
Functionality	
Does the code work?	All code executes successfully and no errors are produced.
Responses to Project Questions	
Question 1: Component analysis ideas	At least one idea for what patterns might arise as components in PCA and ICA has been written.
Question 2: PCA variance	The variance explained by each dimension is appropriately plotted and explained. A reasonable cutoff point for use has been explained.

Question 3: PCA Dimensions	Basis vectors for at least two PCA dimensions have been interpreted correctly and their significance has been discussed.
Question 4: ICA	Basis vectors for at least 4 dimensions of ICA have been interpreted correctly and their significance has been discussed.
Question 5: Cluster Choice	Gaussian Mixtures and K Means have been compared. Student makes a choice which is justified based on characteristics of the algorithms.
Question 6: Cluster Content	More than one choice of number of clusters has been tried out. Elements from each cluster have been sampled and interpreted.
Question 7: Graphic creation	PCA has been used to visualize the data in two dimensions. A plot has been created which clearly shows different clusters. If clusters are not clearly visible some discussion has been made of how to improve the visualization.
Question 8: Naturalness	One method has been discussed in detail and it's usefulness has been discussed.
Question 9: A/B Test	Some method of improving the ability to get good results from an A/B test has been proposed.
Question 10: Prediction	Some techniques that could be used in a supervised learning analysis have been proposed.