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This document is aimed to run a simple experiment on FDA. The user has the option for how many instance, dimensionality and the new dimensionality you would like to obtain. You may run the testScript matlab file which it create a sample 3-D data, and then called the FDA function to get a flavor for how this code works. This testScript will do the entire plot you see in this report.

After that, dimensionality reduction is performed, and results are shown respectively for 2D and 1D. Intuitively the original space which 3D are linearly separable, and therefore the 2-D and 1-D have to be linear separable too

Before:

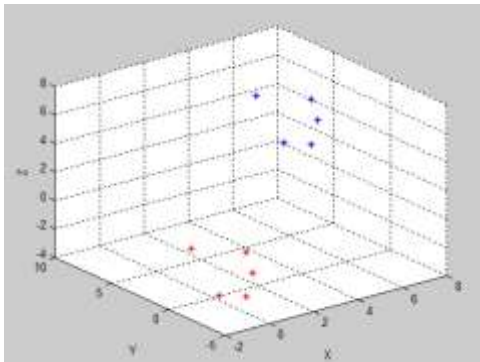


Figure 1: Before calling FDA

After

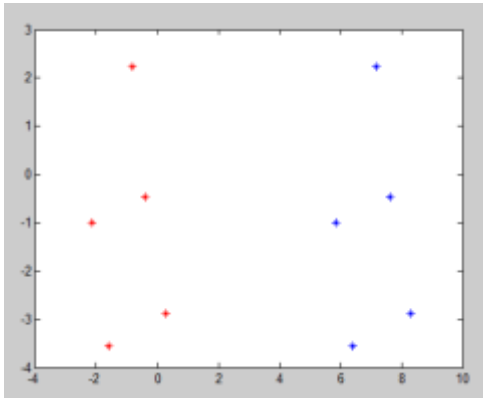


Figure 2 After calling FDA to map original space to 2-D

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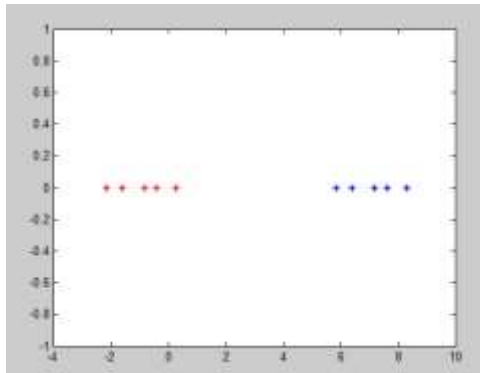


Figure 3 After calling *F FDA* to map original space to 1-D

Please do not forget to add a review and rate this project. It might help someone looking for a quick solution...

-Sultan Alzahrani

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