Robert Hughes Fuzzy Logic Analyzer December 12, 2019 ECPE 226 Dr. Mueller

For the fuzzy logic analyzer that was tasked for us to build we needed to use Fuzzy C-Means to find the centroids of different data clusters. The data that was provided was 3 dimensional o our implementation had to be able to handle this. Using a union we could find the membership of the data and find the centroid using the euclidean distance. This was not too difficult as there were lots of available resources and information on the algorithm that we needed to write. My program allows for the user to enter the number of clusters that they are looking for. I felt that this would be the most useful since it may vary depending on the data entered. As you can see in the attached image the data has four clusters and visually it looks that I was able to accurately identify these points.

