

Report of FFR135 HM3.3 Self organising map

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Figure 1 demonstrates the SOM algorithm has successfully mapped the randomly distributed data into well-separated clusters and each class occupies a different area of the plot.

On the left of Figure 1, the initial weight map shows a relatively scattered and random distribution of the three classes (red, green, and blue dots).

On the right of Figure 1, after training for 10 epochs, the final weight map reveals a more organized distribution, where the neurons corresponding to each class are grouped into distinct regions. However, in the lower-right corner, some red and green points are still mixed. It can be speculated that with further training epochs, the program could better separate the red and green class data.

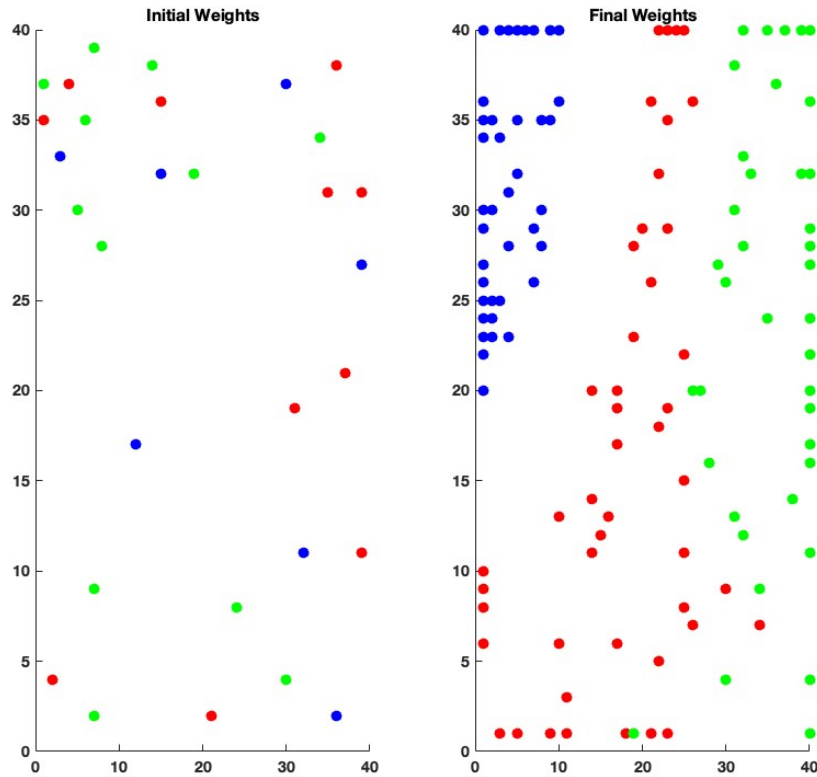


Figure 1: Weights maps: initial weights(left), final weights(right)