

Gruppenteilnahme

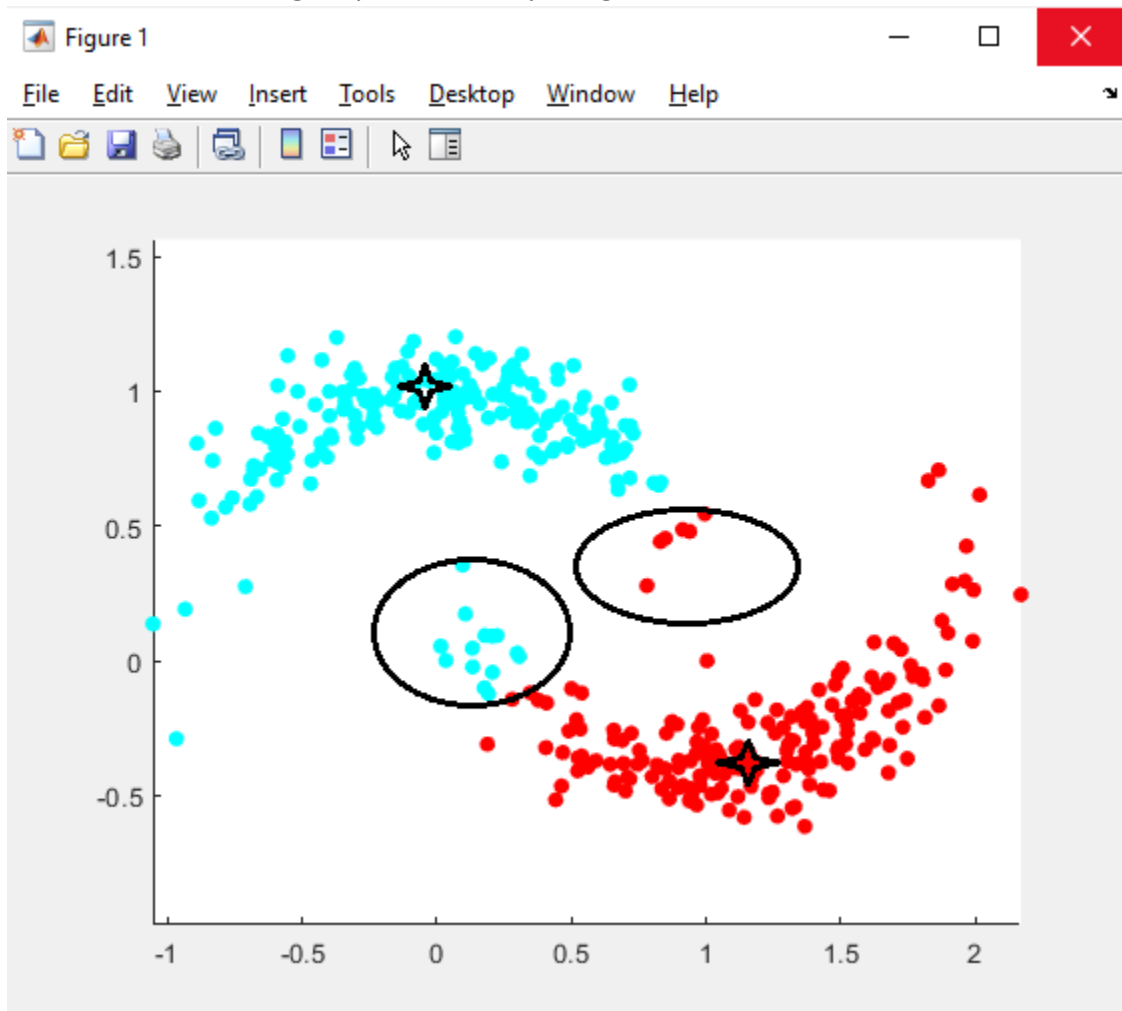
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Kontrollfrage

- a) Warum lässt sich die Menge X3 nicht korrekt mit dem k-Means-Algorithmus clustern?
- ⇒ Some point at the edge of each cluster (pointed in circle) stay closer to the other cluster's centroid than its own cluster centroid.
 - ⇒ Clustering with k-Means based on distance of point, which need to be classified, to the center of the group. That's why we got this false result



- b) Wieso liefert die *Elbow Method* nicht in jedem Fall ein eindeutiges Ergebnis?
 ⇒ Because we initialize centroid by picking up random points in data-set, which yield definitely different results after each run.
- c) Nennen Sie Unterschiede zwischen k-Means und Mean-Shift. Was sind die Vorteile der einzelnen Verfahren

	Meanshift	K-Means
Parameter	Window size w	Number of Cluster k
Number of Cluster	Depend on w	Initialize set
Determinism	yes	Not certainly, based on initialization
Outlier-sensitive	low	high
Cluster-Form	vary	Look like a circle