**TALLER 2**

**REDES NEURONALES**

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**Fecha:** 2023-08-22

**APRENDIZAJE NO SUPERVISADO**

**1. Path-Based1**

|  |  |  |
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| **kmeans** | **kmedoids** | **DBSCAN** |
|  |  |  |
|  |  |  |
| k = 15 | k=15 | epsilon=3,4176  Nro. Vecinos = 15  (2 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 2,0846 | 2,0108 | 9,1704 |
| **SSB** | 9,1903 | 9,1714 | 1,4327 |
| **WB-index** | 3,4024 | 3,2887 | 12,8019 |
| **Silhouette** | 0,5426 | 0,5730 | 0,3226 |

**2. Aggregation**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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| k=18 | k=18 | epsilon=1,7012  Nro. Vecinos = 10  (7 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 2,0270 | 1,9570 | 4,0037 |
| **SSB** | 12,0144 | 12,0232 | 11,3974 |
| **WB-index** | 3,0368 | 2,9298 | 2,4590 |
| **Silhouette** | 0,6038 | 0,5771 | 0,5696 |

**3. Path-based2**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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| k=25 | k=25 | ep=3,9254  Nro. Vecinos = 10  (2 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 1,8793 | 1,7429 | 9,2787 |
| **SSB** | 9,1270 | 9,0813 | 0,3587 |
| **WB-index** | 5,1475 | 4,7980 | 51,7411 |
| **Silhouette** | 0,5509 | 0,5879 | 0,3424 |

**4. S3**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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| k = 20 | k = 20 | epsilon = 2,8716 e4  Nro. Vecinos = 10  (2 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 4,53 e4 | 4,52 e4 | 2,5766 e5 |
| **SSB** | 2,5450 e5 | 2,5455 e5 | 3,8212 e3 |
| **WB-index** | 3,5388 | 3,5513 | 134,8550 |
| **Silhouette** | 0,6073 | 0,6038 | 0,3083 |

**5. Zelnik1**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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| k=25 | k=25 | epsilon=0,0750  Nro. Vecinos = 20  (2 clusters) |

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| --- | --- | --- | --- |
|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 0,0268 | 0,0262 | 0,1754 |
| **SSB** | 0,1703 | 0,1704 | 0,0015 |
| **WB-index** | 3,9413 | 3,8480 | 231,2972 |
| **Silhouette** | 0,7286 | 0,7183 | 0,3890 |

**6. Ds3c3sc6**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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|  |  |  |
| k=15 | k=15 | epsilon = 0,0080  Nro. Vecinos = 15  (3 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 0,0178 | 0,0175 | 0,0498 |
| **SSB** | 0,0952 | 0,0954 | 0,0832 |
| **WB-index** | 2,8075 | 2,7564 | 1,7975 |
| **Silhouette** | 0,5598 | 0,5557 | 0,5101 |

**7. Complex9**

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| **kmeans** | **kmedoids** | **DBSCAN** |
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|  |  |  |
| **k=14** | **k=14** | epsilon=17,5333  Nro. Vecinos = 10  (7 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 46,3844 | 47,9522 | 101,0024 |
| **SSB** | 212,8512 | 213,5675 | 195,3166 |
| **WB-index** | 3,0509 | 3,1434 | 3,6198 |
| **Silhouette** | 0,5887 | 0,5667 | 0,0755 |

**8. rings**

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| **kmeans** | **kmedoids** | **DBSCAN** |
|  |  |  |
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| k=27 | k=27 | epsilon=1,4070  Nro. Vecinos = 10  (11 clusters) |

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|  | **k-means** | **k-medoids** | **DBSCAN** |
| **SSW** | 1,0909 | 1,0712 | 3,1277 |
| **SSB** | 5,0938 | 5,1265 | 2,7865 |
| **WB-index** | 5,7825 | 5,6419 | 12,3469 |
| **Silhouette** | 0,5430 | 0,5462 | 0,2922 |