**1)**

**Attribute Evaluator: CFsSubsetEval**

**Search Method : BestFit**

**Using full training set**

**Output:**

**Selected attributes: 10,75,77 : 3**

**9.0**

**74.0**

**76.0**

**2)**

**Attribute Evaluator: CorrelationAttributeEval**

**Search Method : Ranker**

**Using full training set**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (supervised, Class (numeric): 83 82.0):**

**Correlation Ranking Filter**

**Ranked attributes:**

**0.17211 75 74.0**

**0.17184 77 76.0**

**0.1523 47 46.0**

**0.13488 21 20.0**

**0.13415 40 39.0**

**0.13201 82 81.0**

**0.13172 45 44.0**

**0.12825 68 67.0**

**0.12703 6 5.0**

**0.12453 36 35.0**

**0.12288 80 79.0**

**0.12214 71 70.0**

**0.12192 38 37.0**

**0.11826 72 71.0**

**0.11697 46 45.0**

**0.11532 70 69.0**

**0.11495 81 80.0**

**0.1144 73 72.0**

**0.11247 37 36.0**

**0.10752 49 48.0**

**0.10404 69 68.0**

**0.10329 74 73.0**

**0.1031 4 3.0**

**0.10253 39 38.0**

**0.10077 35 34.0**

**0.09976 67 66.0**

**0.09539 65 64.0**

**0.09321 48 47.0**

**0.09206 76 75.0**

**0.08417 5 4.0**

**0.08386 64 63.0**

**0.07913 66 65.0**

**0.07868 79 78.0**

**0.07039 42 41.0**

**0.02952 14 13.0**

**0.02677 3 2.0**

**0.02527 78 77.0**

**0.02458 56 55.0**

**0.02187 57 56.0**

**0.01488 12 11.0**

**0.01214 1 0.0**

**0.01061 11 10.0**

**0.0073 13 12.0**

**0.0064 2 1.0**

**0.00503 55 54.0**

**0 18 17.0**

**0 19 18.0**

**0 16 15.0**

**0 20 19.0**

**0 44 43.0**

**0 17 16.0**

**0 58 57.0**

**0 15 14.0**

**0 61 60.0**

**0 62 61.0**

**0 60 59.0**

**0 23 22.0**

**0 59 58.0**

**0 22 21.0**

**0 43 42.0**

**0 24 23.0**

**0 33 32.0**

**0 25 24.0**

**0 53 52.0**

**0 52 51.0**

**0 51 50.0**

**0 50 49.0**

**0 34 33.0**

**0 54 53.0**

**0 32 31.0**

**0 31 30.0**

**0 28 27.0**

**0 29 28.0**

**0 27 26.0**

**0 26 25.0**

**0 30 29.0**

**-0.00719 63 62.0**

**-0.0074 9 8.0**

**-0.00839 8 7.0**

**-0.0182 7 6.0**

**-0.0284 10 9.0**

**-0.03474 41 40.0**

**Selected attributes: 75,77,47,21,40,82,45,68,6,36,80,71,38,72,46,70,81,73,37,49,69,74,4,39,35,67,65,48,76,5,64,66,79,42,14,3,78,56,57,12,1,11,13,2,55,18,19,16,20,44,17,58,15,61,62,60,23,59,22,43,24,33,25,53,52,51,50,34,54,32,31,28,29,27,26,30,63,9,8,7,10,41 : 82**

**3)**

**Attribute Evaluator: PrincipalComponent**

**Search Method : Ranker**

**Using full training set**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (unsupervised):**

**Principal Components Attribute Transformer**

**Correlation matrix**

**1 0.81 0.55 0.3 0.28 0.23 0.72 0.8 0.75 0.67 0.88 1 0.81 0.55 0.15 0.28 0.32 0.31 0.23 0.33 0.23 0.06 0.22 0.32 0.32 0.26 0.19 0.33 0.42 0.45 0.44 -0.14 0.3 0.3 0.3 0.32 0.21 0.3 0.33 0.32 0.33 0.27 0.35 0.25 0.36 0.17 0.13 0.31 0.29 0.31 0.29**

**0.81 1 0.4 0.25 0.3 0.18 0.95 0.97 0.96 0.86 0.98 0.8 1 0.39 0.12 0.28 0.25 0.32 0.22 0.33 0.17 0.13 0.29 0.33 0.33 0.23 0.19 0.35 0.55 0.54 0.57 -0.19 0.33 0.3 0.31 0.36 0.2 0.28 0.34 0.33 0.33 0.25 0.36 0.25 0.41 0.18 0.21 0.32 0.29 0.31 0.28**

**0.55 0.4 1 0.25 0.22 0.39 0.34 0.37 0.39 0.23 0.55 0.55 0.38 1 0.14 0.27 0.26 0.24 0.24 0.25 0.39 0.08 0.21 0.23 0.22 0.2 0.07 0.23 0.17 0.2 0.23 0.17 0.22 0.22 0.23 0.18 0.18 0.24 0.24 0.25 0.24 0.22 0.25 0.2 0.2 0.07 -0.02 0.21 0.19 0.27 0.23**

**0.3 0.25 0.25 1 0.97 0.85 0.19 0.22 0.24 0.12 0.29 0.29 0.23 0.24 0.93 0.99 0.98 0.96 0.88 0.96 0.83 0.58 0.71 0.96 0.96 0.97 0.58 0.96 0.58 0.58 0.61 -0.12 0.95 0.96 0.95 0.94 0.95 0.97 0.96 0.96 0.96 0.97 0.95 0.95 0.81 0.54 0.53 0.93 0.94 0.84 0.89**

**0.28 0.3 0.22 0.97 1 0.8 0.24 0.27 0.29 0.18 0.32 0.27 0.27 0.21 0.89 0.99 0.94 0.96 0.9 0.96 0.78 0.67 0.77 0.96 0.96 0.95 0.58 0.95 0.62 0.63 0.66 -0.13 0.94 0.95 0.94 0.94 0.93 0.96 0.96 0.95 0.96 0.95 0.95 0.93 0.83 0.56 0.6 0.93 0.94 0.84 0.89**

**0.23 0.18 0.39 0.85 0.8 1 0.14 0.17 0.19 0.06 0.24 0.22 0.16 0.38 0.84 0.88 0.86 0.84 0.78 0.83 1 0.36 0.52 0.8 0.81 0.82 0.49 0.81 0.37 0.36 0.41 0.1 0.83 0.84 0.85 0.78 0.87 0.84 0.82 0.82 0.82 0.85 0.79 0.86 0.64 0.3 0.32 0.75 0.78 0.72 0.79**

**0.72 0.95 0.34 0.19 0.24 0.14 1 0.94 0.99 0.94 0.92 0.72 0.95 0.34 0.09 0.22 0.2 0.26 0.14 0.28 0.14 0.07 0.22 0.28 0.29 0.17 0.15 0.31 0.59 0.51 0.59 -0.17 0.3 0.26 0.29 0.34 0.16 0.22 0.28 0.27 0.27 0.2 0.3 0.21 0.37 0.13 0.16 0.26 0.22 0.23 0.2**

**0.8 0.97 0.37 0.22 0.27 0.17 0.94 1 0.94 0.86 0.95 0.8 0.97 0.37 0.11 0.25 0.23 0.29 0.17 0.31 0.17 0.09 0.24 0.3 0.31 0.2 0.19 0.33 0.53 0.53 0.54 -0.16 0.31 0.3 0.3 0.34 0.18 0.25 0.31 0.3 0.3 0.23 0.33 0.23 0.39 0.15 0.16 0.29 0.25 0.28 0.25**

**0.75 0.96 0.39 0.24 0.29 0.19 0.99 0.94 1 0.91 0.94 0.75 0.96 0.39 0.13 0.27 0.24 0.31 0.18 0.33 0.18 0.09 0.25 0.32 0.33 0.22 0.17 0.35 0.6 0.53 0.61 -0.18 0.35 0.31 0.33 0.38 0.2 0.27 0.33 0.32 0.32 0.25 0.35 0.25 0.4 0.14 0.16 0.31 0.27 0.28 0.25**

**0.67 0.86 0.23 0.12 0.18 0.06 0.94 0.86 0.91 1 0.82 0.67 0.86 0.23 0.03 0.15 0.12 0.19 0.07 0.21 0.06 0.06 0.17 0.2 0.21 0.09 0.1 0.24 0.57 0.46 0.55 -0.16 0.23 0.19 0.21 0.3 0.09 0.14 0.2 0.18 0.19 0.12 0.22 0.13 0.3 0.13 0.17 0.17 0.15 0.13 0.11**

**0.88 0.98 0.55 0.29 0.32 0.24 0.92 0.95 0.94 0.82 1 0.87 0.98 0.55 0.14 0.31 0.29 0.34 0.25 0.36 0.24 0.13 0.29 0.35 0.35 0.26 0.19 0.37 0.53 0.52 0.55 -0.14 0.34 0.32 0.33 0.37 0.22 0.31 0.36 0.35 0.35 0.28 0.38 0.27 0.41 0.18 0.18 0.34 0.3 0.34 0.3**

**1 0.8 0.55 0.29 0.27 0.22 0.72 0.8 0.75 0.67 0.87 1 0.81 0.55 0.14 0.27 0.31 0.3 0.22 0.32 0.22 0.05 0.21 0.32 0.31 0.25 0.19 0.33 0.41 0.44 0.44 -0.13 0.29 0.29 0.29 0.31 0.21 0.29 0.32 0.32 0.32 0.26 0.34 0.24 0.35 0.17 0.12 0.31 0.28 0.31 0.28**

**0.81 1 0.38 0.23 0.27 0.16 0.95 0.97 0.96 0.86 0.98 0.81 1 0.38 0.11 0.25 0.23 0.3 0.19 0.31 0.16 0.08 0.23 0.31 0.31 0.22 0.19 0.34 0.55 0.53 0.56 -0.18 0.31 0.29 0.29 0.34 0.18 0.26 0.32 0.31 0.31 0.23 0.34 0.23 0.4 0.17 0.19 0.3 0.27 0.29 0.26**

**0.55 0.39 1 0.24 0.21 0.38 0.34 0.37 0.39 0.23 0.55 0.55 0.38 1 0.14 0.25 0.25 0.23 0.23 0.24 0.38 0.06 0.19 0.22 0.22 0.19 0.07 0.22 0.17 0.19 0.22 0.17 0.21 0.21 0.22 0.17 0.17 0.23 0.23 0.24 0.23 0.21 0.24 0.19 0.19 0.07 -0.03 0.2 0.19 0.27 0.22**

**0.15 0.12 0.14 0.93 0.89 0.84 0.09 0.11 0.13 0.03 0.14 0.14 0.11 0.14 1 0.92 0.94 0.92 0.84 0.9 0.84 0.42 0.57 0.91 0.92 0.95 0.54 0.9 0.49 0.45 0.51 -0.12 0.93 0.93 0.93 0.91 0.98 0.94 0.91 0.91 0.91 0.96 0.88 0.95 0.71 0.48 0.49 0.88 0.9 0.79 0.85**

**0.28 0.28 0.27 0.99 0.99 0.88 0.22 0.25 0.27 0.15 0.31 0.27 0.25 0.25 0.92 1 0.96 0.97 0.9 0.97 0.86 0.61 0.73 0.96 0.96 0.96 0.58 0.96 0.58 0.58 0.62 -0.09 0.95 0.96 0.95 0.94 0.95 0.97 0.96 0.96 0.96 0.97 0.95 0.96 0.81 0.52 0.55 0.93 0.94 0.84 0.9**

**0.32 0.25 0.26 0.98 0.94 0.86 0.2 0.23 0.24 0.12 0.29 0.31 0.23 0.25 0.94 0.96 1 0.98 0.88 0.97 0.86 0.42 0.62 0.98 0.98 0.98 0.63 0.97 0.6 0.6 0.63 -0.12 0.97 0.98 0.97 0.94 0.97 0.98 0.97 0.97 0.97 0.98 0.96 0.97 0.84 0.49 0.47 0.94 0.93 0.88 0.91**

**0.31 0.32 0.24 0.96 0.96 0.84 0.26 0.29 0.31 0.19 0.34 0.3 0.3 0.23 0.92 0.97 0.98 1 0.91 1 0.84 0.44 0.64 0.99 0.99 0.97 0.66 0.99 0.67 0.68 0.71 -0.14 0.99 0.99 0.98 0.97 0.97 0.98 0.99 0.99 0.99 0.98 0.99 0.97 0.89 0.5 0.52 0.96 0.94 0.9 0.92**

**0.23 0.22 0.24 0.88 0.9 0.78 0.14 0.17 0.18 0.07 0.25 0.22 0.19 0.23 0.84 0.9 0.88 0.91 1 0.9 0.77 0.49 0.66 0.87 0.87 0.9 0.56 0.85 0.53 0.56 0.56 -0.09 0.85 0.86 0.84 0.84 0.86 0.88 0.87 0.87 0.87 0.88 0.86 0.86 0.74 0.53 0.52 0.84 0.86 0.74 0.79**

**0.33 0.33 0.25 0.96 0.96 0.83 0.28 0.31 0.33 0.21 0.36 0.32 0.31 0.24 0.9 0.97 0.97 1 0.9 1 0.83 0.43 0.63 0.99 0.99 0.96 0.65 0.99 0.68 0.69 0.72 -0.14 0.99 0.99 0.98 0.96 0.95 0.98 0.99 0.99 0.99 0.98 0.99 0.96 0.9 0.48 0.5 0.96 0.93 0.9 0.92**

**0.23 0.17 0.39 0.83 0.78 1 0.14 0.17 0.18 0.06 0.24 0.22 0.16 0.38 0.84 0.86 0.86 0.84 0.77 0.83 1 0.3 0.47 0.8 0.82 0.82 0.5 0.81 0.37 0.36 0.41 0.1 0.84 0.84 0.85 0.78 0.87 0.84 0.82 0.82 0.82 0.85 0.79 0.87 0.64 0.28 0.3 0.75 0.78 0.73 0.79**

**0.06 0.13 0.08 0.58 0.67 0.36 0.07 0.09 0.09 0.06 0.13 0.05 0.08 0.06 0.42 0.61 0.42 0.44 0.49 0.43 0.3 1 0.76 0.45 0.44 0.46 0.11 0.43 0.21 0.21 0.23 -0.05 0.41 0.42 0.41 0.45 0.43 0.47 0.45 0.44 0.44 0.45 0.44 0.42 0.3 0.46 0.57 0.45 0.51 0.3 0.4**

**0.22 0.29 0.21 0.71 0.77 0.52 0.22 0.24 0.25 0.17 0.29 0.21 0.23 0.19 0.57 0.73 0.62 0.64 0.66 0.63 0.47 0.76 1 0.65 0.64 0.65 0.34 0.63 0.47 0.48 0.49 -0.09 0.61 0.61 0.6 0.64 0.59 0.63 0.64 0.63 0.64 0.62 0.64 0.59 0.55 0.49 0.47 0.58 0.62 0.51 0.54**

**0.32 0.33 0.23 0.96 0.96 0.8 0.28 0.3 0.32 0.2 0.35 0.32 0.31 0.22 0.91 0.96 0.98 0.99 0.87 0.99 0.8 0.45 0.65 1 1 0.97 0.69 1 0.69 0.7 0.72 -0.16 0.98 0.98 0.97 0.96 0.95 0.98 0.99 0.99 0.99 0.97 0.99 0.97 0.9 0.53 0.55 0.96 0.94 0.91 0.93**

**0.32 0.33 0.22 0.96 0.96 0.81 0.29 0.31 0.33 0.21 0.35 0.31 0.31 0.22 0.92 0.96 0.98 0.99 0.87 0.99 0.82 0.44 0.64 1 1 0.97 0.67 1 0.69 0.7 0.73 -0.16 0.99 0.99 0.98 0.97 0.96 0.98 0.99 0.99 0.99 0.98 0.99 0.97 0.9 0.52 0.53 0.96 0.94 0.9 0.93**

**0.26 0.23 0.2 0.97 0.95 0.82 0.17 0.2 0.22 0.09 0.26 0.25 0.22 0.19 0.95 0.96 0.98 0.97 0.9 0.96 0.82 0.46 0.65 0.97 0.97 1 0.64 0.96 0.59 0.61 0.62 -0.15 0.95 0.96 0.94 0.94 0.97 0.97 0.96 0.96 0.96 0.97 0.95 0.97 0.83 0.56 0.54 0.94 0.95 0.86 0.9**

**0.19 0.19 0.07 0.58 0.58 0.49 0.15 0.19 0.17 0.1 0.19 0.19 0.19 0.07 0.54 0.58 0.63 0.66 0.56 0.65 0.5 0.11 0.34 0.69 0.67 0.64 1 0.67 0.59 0.68 0.59 -0.06 0.62 0.64 0.6 0.61 0.59 0.59 0.64 0.63 0.64 0.59 0.65 0.61 0.74 0.28 0.42 0.66 0.54 0.66 0.62**

**0.33 0.35 0.23 0.96 0.95 0.81 0.31 0.33 0.35 0.24 0.37 0.33 0.34 0.22 0.9 0.96 0.97 0.99 0.85 0.99 0.81 0.43 0.63 1 1 0.96 0.67 1 0.71 0.71 0.74 -0.16 0.99 0.99 0.98 0.98 0.95 0.98 0.99 0.99 0.99 0.97 0.99 0.97 0.91 0.5 0.53 0.96 0.93 0.91 0.93**

**0.42 0.55 0.17 0.58 0.62 0.37 0.59 0.53 0.6 0.57 0.53 0.41 0.55 0.17 0.49 0.58 0.6 0.67 0.53 0.68 0.37 0.21 0.47 0.69 0.69 0.59 0.59 0.71 1 0.93 0.99 -0.22 0.69 0.66 0.65 0.73 0.53 0.58 0.66 0.64 0.65 0.57 0.68 0.56 0.81 0.41 0.46 0.62 0.53 0.59 0.52**

**0.45 0.54 0.2 0.58 0.63 0.36 0.51 0.53 0.53 0.46 0.52 0.44 0.53 0.19 0.45 0.58 0.6 0.68 0.56 0.69 0.36 0.21 0.48 0.7 0.7 0.61 0.68 0.71 0.93 1 0.94 -0.21 0.67 0.66 0.64 0.68 0.51 0.59 0.68 0.66 0.67 0.56 0.71 0.55 0.87 0.34 0.39 0.66 0.54 0.67 0.57**

**0.44 0.57 0.23 0.61 0.66 0.41 0.59 0.54 0.61 0.55 0.55 0.44 0.56 0.22 0.51 0.62 0.63 0.71 0.56 0.72 0.41 0.23 0.49 0.72 0.73 0.62 0.59 0.74 0.99 0.94 1 -0.22 0.73 0.69 0.69 0.76 0.57 0.63 0.7 0.68 0.69 0.61 0.72 0.59 0.84 0.41 0.45 0.66 0.57 0.64 0.56**

**-0.14 -0.19 0.17 -0.12 -0.13 0.1 -0.17 -0.16 -0.18 -0.16 -0.14 -0.13 -0.18 0.17 -0.12 -0.09 -0.12 -0.14 -0.09 -0.14 0.1 -0.05 -0.09 -0.16 -0.16 -0.15 -0.06 -0.16 -0.22 -0.21 -0.22 1 -0.15 -0.14 -0.14 -0.18 -0.13 -0.15 -0.16 -0.15 -0.15 -0.14 -0.16 -0.13 -0.15 -0.16 -0.16 -0.17 -0.19 -0.13 -0.12**

**0.3 0.33 0.22 0.95 0.94 0.83 0.3 0.31 0.35 0.23 0.34 0.29 0.31 0.21 0.93 0.95 0.97 0.99 0.85 0.99 0.84 0.41 0.61 0.98 0.99 0.95 0.62 0.99 0.69 0.67 0.73 -0.15 1 0.99 1 0.98 0.97 0.97 0.99 0.98 0.98 0.98 0.98 0.97 0.88 0.47 0.49 0.95 0.93 0.88 0.91**

**0.3 0.3 0.22 0.96 0.95 0.84 0.26 0.3 0.31 0.19 0.32 0.29 0.29 0.21 0.93 0.96 0.98 0.99 0.86 0.99 0.84 0.42 0.61 0.98 0.99 0.96 0.64 0.99 0.66 0.66 0.69 -0.14 0.99 1 0.99 0.97 0.97 0.98 0.99 0.99 0.99 0.98 0.98 0.98 0.88 0.46 0.48 0.96 0.94 0.9 0.93**

**0.3 0.31 0.23 0.95 0.94 0.85 0.29 0.3 0.33 0.21 0.33 0.29 0.29 0.22 0.93 0.95 0.97 0.98 0.84 0.98 0.85 0.41 0.6 0.97 0.98 0.94 0.6 0.98 0.65 0.64 0.69 -0.14 1 0.99 1 0.97 0.97 0.98 0.98 0.98 0.98 0.98 0.98 0.97 0.86 0.44 0.45 0.95 0.93 0.89 0.92**

**0.32 0.36 0.18 0.94 0.94 0.78 0.34 0.34 0.38 0.3 0.37 0.31 0.34 0.17 0.91 0.94 0.94 0.97 0.84 0.96 0.78 0.45 0.64 0.96 0.97 0.94 0.61 0.98 0.73 0.68 0.76 -0.18 0.98 0.97 0.97 1 0.95 0.95 0.96 0.95 0.96 0.95 0.95 0.95 0.85 0.55 0.6 0.91 0.92 0.82 0.86**

**0.21 0.2 0.18 0.95 0.93 0.87 0.16 0.18 0.2 0.09 0.22 0.21 0.18 0.17 0.98 0.95 0.97 0.97 0.86 0.95 0.87 0.43 0.59 0.95 0.96 0.97 0.59 0.95 0.53 0.51 0.57 -0.13 0.97 0.97 0.97 0.95 1 0.98 0.96 0.96 0.96 0.99 0.94 0.99 0.77 0.49 0.51 0.93 0.95 0.84 0.9**

**0.3 0.28 0.24 0.97 0.96 0.84 0.22 0.25 0.27 0.14 0.31 0.29 0.26 0.23 0.94 0.97 0.98 0.98 0.88 0.98 0.84 0.47 0.63 0.98 0.98 0.97 0.59 0.98 0.58 0.59 0.63 -0.15 0.97 0.98 0.98 0.95 0.98 1 0.99 0.99 0.99 1 0.98 0.97 0.83 0.47 0.49 0.96 0.96 0.9 0.94**

**0.33 0.34 0.24 0.96 0.96 0.82 0.28 0.31 0.33 0.2 0.36 0.32 0.32 0.23 0.91 0.96 0.97 0.99 0.87 0.99 0.82 0.45 0.64 0.99 0.99 0.96 0.64 0.99 0.66 0.68 0.7 -0.16 0.99 0.99 0.98 0.96 0.96 0.99 1 1 1 0.98 1 0.97 0.9 0.49 0.5 0.97 0.95 0.92 0.94**

**0.32 0.33 0.25 0.96 0.95 0.82 0.27 0.3 0.32 0.18 0.35 0.32 0.31 0.24 0.91 0.96 0.97 0.99 0.87 0.99 0.82 0.44 0.63 0.99 0.99 0.96 0.63 0.99 0.64 0.66 0.68 -0.15 0.98 0.99 0.98 0.95 0.96 0.99 1 1 1 0.98 1 0.97 0.9 0.48 0.48 0.97 0.95 0.93 0.95**

**0.33 0.33 0.24 0.96 0.96 0.82 0.27 0.3 0.32 0.19 0.35 0.32 0.31 0.23 0.91 0.96 0.97 0.99 0.87 0.99 0.82 0.44 0.64 0.99 0.99 0.96 0.64 0.99 0.65 0.67 0.69 -0.15 0.98 0.99 0.98 0.96 0.96 0.99 1 1 1 0.98 1 0.97 0.9 0.49 0.49 0.97 0.95 0.92 0.94**

**0.27 0.25 0.22 0.97 0.95 0.85 0.2 0.23 0.25 0.12 0.28 0.26 0.23 0.21 0.96 0.97 0.98 0.98 0.88 0.98 0.85 0.45 0.62 0.97 0.98 0.97 0.59 0.97 0.57 0.56 0.61 -0.14 0.98 0.98 0.98 0.95 0.99 1 0.98 0.98 0.98 1 0.97 0.99 0.81 0.48 0.51 0.95 0.96 0.88 0.93**

**0.35 0.36 0.25 0.95 0.95 0.79 0.3 0.33 0.35 0.22 0.38 0.34 0.34 0.24 0.88 0.95 0.96 0.99 0.86 0.99 0.79 0.44 0.64 0.99 0.99 0.95 0.65 0.99 0.68 0.71 0.72 -0.16 0.98 0.98 0.98 0.95 0.94 0.98 1 1 1 0.97 1 0.95 0.92 0.48 0.48 0.97 0.94 0.93 0.94**

**0.25 0.25 0.2 0.95 0.93 0.86 0.21 0.23 0.25 0.13 0.27 0.24 0.23 0.19 0.95 0.96 0.97 0.97 0.86 0.96 0.87 0.42 0.59 0.97 0.97 0.97 0.61 0.97 0.56 0.55 0.59 -0.13 0.97 0.98 0.97 0.95 0.99 0.97 0.97 0.97 0.97 0.99 0.95 1 0.82 0.5 0.51 0.94 0.95 0.87 0.92**

**0.36 0.41 0.2 0.81 0.83 0.64 0.37 0.39 0.4 0.3 0.41 0.35 0.4 0.19 0.71 0.81 0.84 0.89 0.74 0.9 0.64 0.3 0.55 0.9 0.9 0.83 0.74 0.91 0.81 0.87 0.84 -0.15 0.88 0.88 0.86 0.85 0.77 0.83 0.9 0.9 0.9 0.81 0.92 0.82 1 0.41 0.4 0.88 0.77 0.89 0.82**

**0.17 0.18 0.07 0.54 0.56 0.3 0.13 0.15 0.14 0.13 0.18 0.17 0.17 0.07 0.48 0.52 0.49 0.5 0.53 0.48 0.28 0.46 0.49 0.53 0.52 0.56 0.28 0.5 0.41 0.34 0.41 -0.16 0.47 0.46 0.44 0.55 0.49 0.47 0.49 0.48 0.49 0.48 0.48 0.5 0.41 1 0.75 0.46 0.54 0.32 0.35**

**0.13 0.21 -0.02 0.53 0.6 0.32 0.16 0.16 0.16 0.17 0.18 0.12 0.19 -0.03 0.49 0.55 0.47 0.52 0.52 0.5 0.3 0.57 0.47 0.55 0.53 0.54 0.42 0.53 0.46 0.39 0.45 -0.16 0.49 0.48 0.45 0.6 0.51 0.49 0.5 0.48 0.49 0.51 0.48 0.51 0.4 0.75 1 0.51 0.56 0.34 0.44**

**0.31 0.32 0.21 0.93 0.93 0.75 0.26 0.29 0.31 0.17 0.34 0.31 0.3 0.2 0.88 0.93 0.94 0.96 0.84 0.96 0.75 0.45 0.58 0.96 0.96 0.94 0.66 0.96 0.62 0.66 0.66 -0.17 0.95 0.96 0.95 0.91 0.93 0.96 0.97 0.97 0.97 0.95 0.97 0.94 0.88 0.46 0.51 1 0.95 0.92 0.94**

**0.29 0.29 0.19 0.94 0.94 0.78 0.22 0.25 0.27 0.15 0.3 0.28 0.27 0.19 0.9 0.94 0.93 0.94 0.86 0.93 0.78 0.51 0.62 0.94 0.94 0.95 0.54 0.93 0.53 0.54 0.57 -0.19 0.93 0.94 0.93 0.92 0.95 0.96 0.95 0.95 0.95 0.96 0.94 0.95 0.77 0.54 0.56 0.95 1 0.84 0.91**

**0.31 0.31 0.27 0.84 0.84 0.72 0.23 0.28 0.28 0.13 0.34 0.31 0.29 0.27 0.79 0.84 0.88 0.9 0.74 0.9 0.73 0.3 0.51 0.91 0.9 0.86 0.66 0.91 0.59 0.67 0.64 -0.13 0.88 0.9 0.89 0.82 0.84 0.9 0.92 0.93 0.92 0.88 0.93 0.87 0.89 0.32 0.34 0.92 0.84 1 0.94**

**0.29 0.28 0.23 0.89 0.89 0.79 0.2 0.25 0.25 0.11 0.3 0.28 0.26 0.22 0.85 0.9 0.91 0.92 0.79 0.92 0.79 0.4 0.54 0.93 0.93 0.9 0.62 0.93 0.52 0.57 0.56 -0.12 0.91 0.93 0.92 0.86 0.9 0.94 0.94 0.95 0.94 0.93 0.94 0.92 0.82 0.35 0.44 0.94 0.91 0.94 1**

**eigenvalue proportion cumulative**

**32.9862 0.64679 0.64679 -0.17345.0-0.17348.0-0.17269.0-0.17236.0-0.17244.0...**

**7.89765 0.15486 0.80164 0.31512.0+0.3136.0+0.3111.0+0.3117.0+0.31110.0...**

**2.50452 0.04911 0.85075 0.46113.0+0.46 2.0+0.27962.0-0.25354.0+0.25239.0...**

**1.8329 0.03594 0.88669 -0.53640.0-0.38876.0-0.37377.0-0.3541.0+0.24447.0...**

**1.22886 0.0241 0.91079 0.34655.0+0.34 62.0+0.31613.0+0.3152.0+0.29554.0...**

**0.92698 0.01818 0.92896 -0.67962.0+0.24576.0+0.24311.0+0.2420.0-0.2079.0...**

**0.79847 0.01566 0.94462 -0.43676.0+0.42541.0-0.41477.0+0.36940.0-0.32562.0...**

**0.62579 0.01227 0.95689 0.40247.0+0.30311.0+0.2980.0+0.29 62.0-0.25854.0...**

**Eigenvectors**

**V1 V2 V3 V4 V5 V6 V7 V8**

**-0.07 0.2732 0.1415 -0.038 -0.0434 0.2416 -0.062 0.2976 0.0**

**-0.0731 0.3113 -0.0239 -0.0483 -0.1104 -0.0644 0.0009 0.0748 1.0**

**-0.0509 0.1447 0.4598 -0.076 0.3154 0.1987 0.0805 -0.2049 2.0**

**-0.1675 -0.0618 0.0354 -0.0897 -0.0159 0.0015 0.045 0.0238 3.0**

**-0.1678 -0.0471 -0.0208 -0.136 0.0156 -0.0552 0.1066 0.0437 4.0**

**-0.1433 -0.0672 0.2469 0.0076 -0.0595 -0.1765 -0.0895 -0.1346 5.0**

**-0.0637 0.3128 -0.0643 -0.0027 -0.1162 -0.1818 -0.0339 -0.1445 6.0**

**-0.0682 0.311 -0.0219 -0.0159 -0.1246 -0.0925 -0.0274 0.0816 7.0**

**-0.0715 0.3094 -0.0334 -0.0071 -0.111 -0.1463 0.001 -0.1255 8.0**

**-0.0498 0.3004 -0.1228 -0.0231 -0.1101 -0.2074 -0.0816 -0.1654 9.0**

**-0.077 0.3109 0.0724 -0.0568 -0.0507 0.0097 0.0043 0.0654 10.0**

**-0.0686 0.2742 0.1425 -0.0331 -0.04 0.2432 -0.0747 0.3026 11.0**

**-0.0696 0.3151 -0.0276 -0.0217 -0.1177 -0.0603 -0.0462 0.0749 12.0**

**-0.0493 0.1452 0.4609 -0.0681 0.3159 0.2064 0.0569 -0.2072 13.0**

**-0.1565 -0.1071 0.0384 -0.0161 -0.1269 0.0021 -0.1072 -0.1254 20.0**

**-0.1685 -0.0556 0.0446 -0.1025 -0.0117 -0.074 0.0539 0.0035 34.0**

**-0.1687 -0.0583 0.0532 0.0252 -0.0272 0.0399 -0.0295 0.0015 35.0**

**-0.1725 -0.0397 0.0006 0.0328 -0.0024 -0.0008 -0.0126 -0.0134 36.0**

**-0.1529 -0.066 0.0311 -0.0948 0.0551 0.0232 -0.0042 -0.0207 37.0**

**-0.1722 -0.0311 0.005 0.0422 0.0025 -0.0102 0.0116 -0.0211 38.0**

**-0.1428 -0.0677 0.2521 0.0488 -0.0707 -0.1572 -0.1366 -0.1401 39.0**

**-0.0818 -0.0501 -0.0626 -0.5356 0.0449 -0.183 0.3693 0.166 40.0**

**-0.1162 -0.0096 -0.0476 -0.3502 0.1428 -0.1483 0.4254 0.0606 41.0**

**-0.1722 -0.0329 -0.0257 0.029 0.0173 0.0283 -0.0123 0.0349 44.0**

**-0.1727 -0.0326 -0.0221 0.0365 0.0005 0.0073 -0.0152 -0.0069 45.0**

**-0.1671 -0.0707 0.0039 -0.02 -0.0158 0.0593 -0.0481 0.0093 46.0**

**-0.1136 -0.0222 -0.1208 0.244 0.2936 0.0455 -0.1708 0.4016 47.0**

**-0.1726 -0.0233 -0.0268 0.047 0.0009 -0.0054 -0.0055 -0.0154 48.0**

**-0.1234 0.1271 -0.2526 0.1285 0.2948 -0.0516 0.0281 -0.2582 54.0**

**-0.124 0.117 -0.2189 0.1819 0.3456 0.0275 0.1577 0.0297 55.0**

**-0.1297 0.1257 -0.2186 0.13 0.2911 -0.0293 0.0631 -0.2425 56.0**

**0.0272 -0.043 0.2792 0.002 0.34 -0.6794 -0.3249 0.29 62.0**

**-0.171 -0.0319 -0.0112 0.0576 -0.0404 -0.0478 -0.0187 -0.114 63.0**

**-0.1712 -0.0418 0.0066 0.059 -0.0432 -0.0234 0.0064 -0.0356 64.0**

**-0.1698 -0.0373 0.0189 0.0656 -0.071 -0.0505 0.0081 -0.0999 65.0**

**-0.169 -0.0166 -0.069 -0.0121 -0.0257 -0.0389 -0.0791 -0.1455 66.0**

**-0.165 -0.0838 0.0372 -0.0007 -0.1233 -0.0029 -0.1026 -0.0733 67.0**

**-0.1698 -0.0551 0.0389 0.0042 -0.082 0.0262 0.0255 0.007 68.0**

**-0.1725 -0.033 -0.0018 0.0352 -0.0298 0.0107 0.0275 0.0143 69.0**

**-0.1716 -0.0366 0.0144 0.0429 -0.0377 0.018 0.0415 0.0405 70.0**

**-0.1722 -0.0345 0.005 0.0385 -0.0332 0.0138 0.0335 0.0254 71.0**

**-0.1689 -0.067 0.0384 0.0023 -0.0991 0.0146 -0.0259 -0.0253 72.0**

**-0.1718 -0.0226 -0.0082 0.057 -0.0015 0.0166 0.0632 0.045 73.0**

**-0.1674 -0.0669 0.031 0.015 -0.1089 -0.013 -0.0968 -0.0382 74.0**

**-0.156 0.0247 -0.1051 0.1856 0.1765 -0.0087 0.1066 0.0927 75.0**

**-0.0908 -0.0187 -0.1735 -0.3875 0.1727 0.2453 -0.4358 -0.1223 76.0**

**-0.0945 -0.0216 -0.2406 -0.3728 0.1547 0.0958 -0.4145 0.0754 77.0**

**-0.167 -0.036 -0.0157 0.0463 -0.0451 0.0568 0.0271 0.1417 78.0**

**-0.164 -0.0539 0.0066 -0.0734 -0.1315 0.0644 -0.029 0.0498 79.0**

**-0.1563 -0.0265 0.0397 0.1755 0.0175 0.0744 0.133 0.1961 80.0**

**-0.1601 -0.0512 0.0542 0.0798 -0.0975 0.0308 0.0472 0.1988 81.0**

**Ranked attributes:**

**0.3532 1 -0.17345.0-0.17348.0-0.17269.0-0.17236.0-0.17244.0...**

**0.1984 2 0.31512.0+0.3136.0+0.3111.0+0.3117.0+0.31110.0...**

**0.1492 3 0.46113.0+0.46 2.0+0.27962.0-0.25354.0+0.25239.0...**

**0.1133 4 -0.53640.0-0.38876.0-0.37377.0-0.3541.0+0.24447.0...**

**0.0892 5 0.34655.0+0.34 62.0+0.31613.0+0.3152.0+0.29554.0...**

**0.071 6 -0.67962.0+0.24576.0+0.24311.0+0.2420.0-0.2079.0...**

**0.0554 7 -0.43676.0+0.42541.0-0.41477.0+0.36940.0-0.32562.0...**

**0.0431 8 0.40247.0+0.30311.0+0.2980.0+0.29 62.0-0.25854.0...**

**Selected attributes: 1,2,3,4,5,6,7,8 : 8**

**4)**

**Attribute Evaluator: ReliefAttributeEval**

**Search Method : Ranker**

**Using full training set**

**Output:**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (supervised, Class (numeric): 83 82.0):**

**ReliefF Ranking Filter**

**Instances sampled: all**

**Number of nearest neighbours (k): 10**

**Equal influence nearest neighbours**

**Ranked attributes:**

**0.140259 77 76.0**

**0.0856 78 77.0**

**0.081548 48 47.0**

**0.065059 41 40.0**

**0.062092 40 39.0**

**0.060344 82 81.0**

**0.060326 6 5.0**

**0.057454 80 79.0**

**0.056496 75 74.0**

**0.054939 79 78.0**

**0.04914 4 3.0**

**0.047481 5 4.0**

**0.046409 81 80.0**

**0.04547 71 70.0**

**0.045265 45 44.0**

**0.044765 74 73.0**

**0.044126 49 48.0**

**0.043362 72 71.0**

**0.04232 76 75.0**

**0.04189 47 46.0**

**0.041748 70 69.0**

**0.041315 69 68.0**

**0.041208 65 64.0**

**0.040563 46 45.0**

**0.039625 36 35.0**

**0.038054 64 63.0**

**0.035806 14 13.0**

**0.035671 39 38.0**

**0.035098 66 65.0**

**0.034254 3 2.0**

**0.033835 37 36.0**

**0.033817 57 56.0**

**0.033747 35 34.0**

**0.033007 73 72.0**

**0.030708 67 66.0**

**0.030707 68 67.0**

**0.029777 21 20.0**

**0.029101 42 41.0**

**0.02677 55 54.0**

**0.02074 38 37.0**

**0.019583 56 55.0**

**0.000656 8 7.0**

**0 43 42.0**

**0 19 18.0**

**0 20 19.0**

**0 17 16.0**

**0 44 43.0**

**0 22 21.0**

**0 18 17.0**

**0 15 14.0**

**0 16 15.0**

**0 61 60.0**

**0 62 61.0**

**0 60 59.0**

**0 24 23.0**

**0 59 58.0**

**0 23 22.0**

**0 58 57.0**

**0 25 24.0**

**0 33 32.0**

**0 54 53.0**

**0 50 49.0**

**0 26 25.0**

**0 51 50.0**

**0 53 52.0**

**0 52 51.0**

**0 34 33.0**

**0 32 31.0**

**0 31 30.0**

**0 28 27.0**

**0 29 28.0**

**0 27 26.0**

**0 30 29.0**

**-0.001294 9 8.0**

**-0.004199 11 10.0**

**-0.004318 7 6.0**

**-0.006894 1 0.0**

**-0.008766 10 9.0**

**-0.009049 12 11.0**

**-0.011742 2 1.0**

**-0.014387 13 12.0**

**-0.042565 63 62.0**

**Selected attributes: 77,78,48,41,40,82,6,80,75,79,4,5,81,71,45,74,49,72,76,47,70,69,65,46,36,64,14,39,66,3,37,57,35,73,67,68,21,42,55,38,56,8,43,19,20,17,44,22,18,15,16,61,62,60,24,59,23,58,25,33,54,50,26,51,53,52,34,32,31,28,29,27,30,9,11,7,1,10,12,2,13,63 : 82**