

Tabla 5.1: Resultados obtenidos por el algoritmo KNN con PESOS a 1 en el problema del APC

|             | Ozone  |       |        |       | Parkinsons |       |        |       | Spectf-heart |       |        |       |
|-------------|--------|-------|--------|-------|------------|-------|--------|-------|--------------|-------|--------|-------|
|             | %_clas | %red  | Agr.   | T     | %_clas     | %red  | Agr.   | T     | %_clas       | %red  | Agr.   | T     |
| Partición 1 | 68.750 | 0.000 | 34.375 | 0.003 | 67.500     | 0.000 | 33.750 | 0.001 | 64.815       | 0.000 | 32.407 | 0.002 |
| Partición 2 | 79.688 | 0.000 | 39.844 | 0.003 | 80.000     | 0.000 | 40.000 | 0.001 | 79.630       | 0.000 | 39.815 | 0.002 |
| Partición 3 | 75.000 | 0.000 | 37.500 | 0.003 | 94.872     | 0.000 | 47.436 | 0.001 | 81.132       | 0.000 | 40.566 | 0.002 |
| Partición 4 | 82.540 | 0.000 | 41.270 | 0.003 | 63.158     | 0.000 | 31.579 | 0.001 | 60.377       | 0.000 | 30.189 | 0.002 |
| Partición 5 | 82.540 | 0.000 | 41.270 | 0.003 | 71.053     | 0.000 | 35.526 | 0.001 | 73.585       | 0.000 | 36.792 | 0.002 |
| Media       | 77.703 | 0.000 | 38.852 | 0.003 | 75.316     | 0.000 | 37.658 | 0.001 | 71.908       | 0.000 | 35.954 | 0.002 |

Tabla 5.1: Resultados obtenidos por el algoritmo RELIEF en el problema del APC

|             | Ozone  |       |        |       | Parkinsons |       |        |       | Spectf-heart |        |        |       |
|-------------|--------|-------|--------|-------|------------|-------|--------|-------|--------------|--------|--------|-------|
|             | %_clas | %red  | Agr.   | T     | %_clas     | %red  | Agr.   | T     | %_clas       | %red   | Agr.   | T     |
| Partición 1 | 75.000 | 2.778 | 38.889 | 5.581 | 80.000     | 0.000 | 40.000 | 0.897 | 77.778       | 9.091  | 43.434 | 3.106 |
| Partición 2 | 81.250 | 1.389 | 41.319 | 5.584 | 82.500     | 0.000 | 41.250 | 0.904 | 74.074       | 11.364 | 42.719 | 3.538 |
| Partición 3 | 75.000 | 1.389 | 38.194 | 5.556 | 97.436     | 0.000 | 48.718 | 0.926 | 75.472       | 22.727 | 49.099 | 3.213 |
| Partición 4 | 80.952 | 1.389 | 41.171 | 5.591 | 65.789     | 0.000 | 32.895 | 0.928 | 64.151       | 9.091  | 36.621 | 2.846 |
| Partición 5 | 82.540 | 1.389 | 41.964 | 5.595 | 73.684     | 0.000 | 36.842 | 0.915 | 77.358       | 11.364 | 44.361 | 3.013 |
| Media       | 78.948 | 1.667 | 40.308 | 5.581 | 79.882     | 0.000 | 39.941 | 0.914 | 73.767       | 12.727 | 43.247 | 3.143 |

Tabla 5.1: Resultados obtenidos por el algoritmo Simulated Annealing en el problema del APC

|             | Ozone  |        |        |         | Parkinsons |        |        |        | Spectf-heart |        |        |         |
|-------------|--------|--------|--------|---------|------------|--------|--------|--------|--------------|--------|--------|---------|
|             | %_clas | %red   | Agr.   | T       | %_clas     | %red   | Agr.   | T      | %_clas       | %red   | Agr.   | T       |
| Partición 1 | 71.875 | 47.222 | 59.549 | 108.717 | 97.500     | 68.182 | 82.841 | 32.902 | 72.222       | 50.000 | 61.111 | 79.601  |
| Partición 2 | 78.125 | 45.833 | 61.979 | 109.682 | 80.000     | 68.182 | 74.091 | 25.709 | 77.778       | 50.000 | 63.889 | 100.881 |
| Partición 3 | 75.000 | 47.222 | 61.111 | 118.924 | 94.872     | 63.636 | 79.254 | 36.460 | 73.585       | 52.273 | 62.929 | 66.147  |
| Partición 4 | 85.714 | 45.833 | 65.774 | 133.816 | 63.158     | 68.182 | 65.670 | 35.864 | 66.038       | 52.273 | 59.155 | 85.971  |
| Partición 5 | 87.302 | 48.611 | 67.956 | 141.309 | 71.053     | 59.091 | 65.072 | 28.321 | 73.585       | 54.545 | 64.065 | 73.510  |
| Media       | 79.603 | 46.944 | 63.274 | 122.490 | 81.316     | 65.455 | 73.386 | 31.851 | 72.642       | 51.818 | 62.230 | 81.222  |

Tabla 5.1: Resultados obtenidos por el algoritmo Iterated local search en el problema del APC

|  | Ozone  |      |      |   | Parkinsons |      |      |   | Spectf-heart |      |      |   |
|--|--------|------|------|---|------------|------|------|---|--------------|------|------|---|
|  | %_clas | %red | Agr. | T | %_clas     | %red | Agr. | T | %_clas       | %red | Agr. | T |

|                    |        |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Partición 1</b> | 62.500 | 97.222 | 79.861 | 41.614 | 55.000 | 95.455 | 75.227 | 14.693 | 77.778 | 93.182 | 85.480 | 26.315 |
| <b>Partición 2</b> | 70.313 | 97.222 | 83.767 | 40.799 | 75.000 | 95.455 | 85.227 | 14.982 | 72.222 | 93.182 | 82.702 | 27.779 |
| <b>Partición 3</b> | 54.688 | 97.222 | 75.955 | 43.977 | 79.487 | 95.455 | 87.471 | 15.642 | 83.019 | 93.182 | 88.100 | 26.786 |
| <b>Partición 4</b> | 66.667 | 97.222 | 81.944 | 65.921 | 57.895 | 95.455 | 76.675 | 14.835 | 64.151 | 93.182 | 78.666 | 26.785 |
| <b>Partición 5</b> | 68.254 | 97.222 | 82.738 | 41.622 | 47.368 | 95.455 | 71.411 | 14.977 | 71.698 | 93.182 | 82.440 | 26.099 |
| <b>Media</b>       | 64.484 | 97.222 | 80.853 | 46.787 | 62.950 | 95.455 | 79.202 | 15.026 | 73.774 | 93.182 | 83.478 | 26.753 |

Tabla 5.1: Resultados obtenidos por el algoritmo Differential Evolution RAND en el problema del APC

|                    | <b>Ozone</b>  |             |             |          | <b>Parkinsons</b> |             |             |          | <b>Spectf-heart</b> |             |             |          |
|--------------------|---------------|-------------|-------------|----------|-------------------|-------------|-------------|----------|---------------------|-------------|-------------|----------|
|                    | <b>%_clas</b> | <b>%red</b> | <b>Agr.</b> | <b>T</b> | <b>%_clas</b>     | <b>%red</b> | <b>Agr.</b> | <b>T</b> | <b>%_clas</b>       | <b>%red</b> | <b>Agr.</b> | <b>T</b> |
| <b>Partición 1</b> | 57.813        | 97.222      | 77.517      | 41.121   | 65.000            | 95.455      | 80.227      | 15.154   | 74.074              | 95.455      | 84.764      | 26.349   |
| <b>Partición 2</b> | 56.250        | 97.222      | 76.736      | 41.038   | 77.500            | 95.455      | 86.477      | 15.194   | 72.222              | 95.455      | 83.838      | 26.412   |
| <b>Partición 3</b> | 64.063        | 97.222      | 80.642      | 41.512   | 84.615            | 95.455      | 90.035      | 15.183   | 84.906              | 95.455      | 90.180      | 26.801   |
| <b>Partición 4</b> | 53.968        | 97.222      | 75.595      | 41.323   | 63.158            | 95.455      | 79.306      | 15.217   | 69.811              | 95.455      | 82.633      | 26.421   |
| <b>Partición 5</b> | 66.667        | 97.222      | 81.944      | 41.598   | 63.158            | 95.455      | 79.306      | 15.330   | 81.132              | 95.455      | 88.293      | 26.513   |
| <b>Media</b>       | 59.752        | 97.222      | 78.487      | 41.318   | 70.686            | 95.455      | 83.070      | 15.216   | 76.429              | 95.455      | 85.942      | 26.499   |

Tabla 5.1: Resultados obtenidos por el algoritmo Differential Evolution BEST en el problema del APC

|                    | <b>Ozone</b>  |             |             |          | <b>Parkinsons</b> |             |             |          | <b>Spectf-heart</b> |             |             |          |
|--------------------|---------------|-------------|-------------|----------|-------------------|-------------|-------------|----------|---------------------|-------------|-------------|----------|
|                    | <b>%_clas</b> | <b>%red</b> | <b>Agr.</b> | <b>T</b> | <b>%_clas</b>     | <b>%red</b> | <b>Agr.</b> | <b>T</b> | <b>%_clas</b>       | <b>%red</b> | <b>Agr.</b> | <b>T</b> |
| <b>Partición 1</b> | 73.438        | 41.667      | 57.552      | 42.663   | 72.500            | 68.182      | 70.341      | 14.911   | 75.926              | 47.727      | 61.827      | 26.721   |
| <b>Partición 2</b> | 81.250        | 43.056      | 62.153      | 42.400   | 75.000            | 63.636      | 69.318      | 15.011   | 77.778              | 47.727      | 62.753      | 26.748   |
| <b>Partición 3</b> | 71.875        | 48.611      | 60.243      | 43.106   | 89.744            | 77.273      | 83.508      | 14.953   | 73.585              | 52.273      | 62.929      | 26.864   |
| <b>Partición 4</b> | 82.540        | 51.389      | 66.964      | 42.561   | 68.421            | 63.636      | 66.029      | 15.088   | 66.038              | 47.727      | 56.883      | 26.833   |
| <b>Partición 5</b> | 82.540        | 50.000      | 66.270      | 42.802   | 73.684            | 54.545      | 64.115      | 15.117   | 77.358              | 45.455      | 61.407      | 26.864   |
| <b>Media</b>       | 78.328        | 46.944      | 62.636      | 42.706   | 75.870            | 65.455      | 70.662      | 15.016   | 74.137              | 48.182      | 61.159      | 26.806   |