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| **Supplemental Table 1: non-MCI vs amnestic MCI** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 80.33% (+/- 10.35%) | 74.95% (+/- 10.67%) | 76.33% (+/- 9.60%) | 82.67% (+/- 16.64%) |
| CI + Range | 80.33% (+/- 7.80%) | 74.95% (+/- 8.05%) | 76.33% (+/- 7.24%) | 82.67% (+/- 12.55%) |
| Number of Features | 75 | 75 | 125 | 100 |
| 2 Layer, 10,10 Nodes | ACC+STD | 77.48% (+/- 8.26%) | 78.67% (+/- 12.70%) | 79.86% (+/- 16.37%) | 84.33% (+/- 9.32%) |
| CI + Range | 77.48% (+/- 6.23%) | 78.67% (+/- 9.58%) | 79.86% (+/- 12.34%) | 84.33% (+/- 7.03%) |
| Number of Features | 150 | 125 | 75 | 25 |
| 2 Layer, 20,10 Nodes | ACC+STD | 78.90% (+/- 10.49%) | 74.38% (+/- 13.59%) | 80.57% (+/- 15.16%) | 82.00% (+/- 13.46%) |
| CI + Range | 78.90% (+/- 7.91%) | 74.38% (+/- 10.24%) | 80.57% (+/- 11.43%) | 82.00% (+/- 10.15%) |
| Number of Features | 50 | 50 | 125 | 61 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 2: non-MCI vs mixed/dys MCI** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 73.91% (+/- 11.48%) | 81.23% (+/- 13.92%) | 76.29% (+/- 12.55%) | 85.42% (+/- 12.09%) |
| CI + Range | 73.91% (+/- 8.66%) | 81.23% (+/- 10.50%) | 76.29% (+/- 9.46%) | 85.42% (+/- 9.11%) |
| Features | 50 | 75 | 100 | 25 |
| 2 Layer, 10 Nodes | ACC+STD | 69.46% (+/- 9.69%) | 75.44% (+/- 12.98%) | 80.73% (+/- 8.32%) | 80.12% (+/- 13.10%) |
| CI + Range | 69.46% (+/- 7.30%) | 75.44% (+/- 9.78%) | 80.73% (+/- 6.28%) | 80.12% (+/- 9.88%) |
| Features | 50 | 125 | 75 | 25 |
| 2 Layer, 20,10 Nodes | ACC+STD | 70.40% (+/- 8.44%) | 77.40% (+/- 11.32%) | 78.65% (+/- 6.51%) | 83.19% (+/- 12.61%) |
| CI + Range | 70.40% (+/- 6.37%) | 77.40% (+/- 8.53%) | 78.65% (+/- 4.91%) | 83.19% (+/- 9.51%) |
| Number of Features | 50 | 100 | 100 | 12 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 3: non-MCI vs Alzheimer’s disease** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 88.31% (+/- 5.74%) | 90.31% (+/- 10.02%) | 89.67% (+/- 8.06%) | 90.56% (+/- 7.41%) |
| CI + Range | 88.31% (+/- 4.33%) | 90.31% (+/- 7.56%) | 89.67% (+/- 6.08%) | 90.56% (+/- 5.59%) |
| Features | 175 | 125 | 125 | 200 |
| 2 Layer, 10 Nodes | ACC+STD | 89.44% (+/- 6.71%) | 85.78% (+/- 12.74%) | 90.42% (+/- 9.53%) | 89.33% (+/- 7.05%) |
| CI + Range | 89.44% (+/- 5.06%) | 85.78% (+/- 9.61%) | 90.42% (+/- 7.19%) | 89.33% (+/- 5.31%) |
| Features | 200 | 100 | 50 | 150 |
| 2 Layer, 20, 10 Nodes | ACC+STD | 90.44% (+/- 8.93%) | 88.44% (+/- 11.06%) | 88.19% (+/- 9.87%) | 91.42% (+/- 7.98%) |
| CI + Range | 90.44% (+/- 6.74%) | 88.44% (+/- 8.34%) | 88.19% (+/- 7.44%) | 91.42% (+/- 6.02%) |
| Number of Features | 150 | 125 | 50 | 125 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 4: amnestic MCI vs mixed/dysexecutive MCI** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 84.88% (+/- 10.79%) | 84.05% (+/- 13.06%) | 84.23% (+/- 11.43%) | 88.15% (+/- 15.36%) |
| CI + Range | 84.88% (+/- 8.14%) | 84.05% (+/- 9.85%) | 84.23% (+/- 8.62%) | 88.15% (+/- 11.58%) |
| Number of Features | 100 | 50 | 75 | 50 |
| 2 Layer, 10 Nodes | ACC+STD | 81.19% (+/- 8.69%) | 84.11% (+/- 7.83%) | 81.79% (+/- 9.63%) | 89.17% (+/- 12.53%) |
| CI + Range | 81.19% (+/- 6.55%) | 84.11% (+/- 5.90%) | 81.79% (+/- 7.26%) | 89.17% (+/- 9.45%) |
| Number of Features | 100 | 75 | 100 | 150 |
| 2 Layer, 20 Node, 10 Node | ACC+STD | 80.71% (+/- 14.59%) | 79.29% (+/- 14.87%) | 84.52% (+/- 13.43%) | 87.56% (+/- 11.09%) |
| CI + Range | 80.71% (+/- 11.00%) | 79.29% (+/- 11.21%) | 84.52% (+/- 10.12%) | 87.56% (+/- 8.36%) |
| Number of Features | 50 | 50 | 50 | 200 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 5: amnestic MCI vs. Alzheimer’s Disease** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 89.31% (+/- 11.75%) | 90.69% (+/- 10.99%) | 90.69% (+/- 10.13%) | 91.49% (+/- 7.94%) |
| CI + Range | 89.31% (+/- 8.86%) | 90.69% (+/- 8.29%) | 90.69% (+/- 7.64%) | 91.49% (+/- 5.99%) |
| Number of Features | 200 | 125 | 100 | 125 |
| 2 Layer, 10 Nodes | ACC+STD | 85.97% (+/- 11.36%) | 85.65% (+/- 11.88%) | 88.61% (+/- 12.45%) | 88.29% (+/- 9.99%) |
| CI + Range | 85.97% (+/- 8.57%) | 85.65% (+/- 8.96%) | 88.61% (+/- 9.39%) | 88.29% (+/- 7.53%) |
| Number of Features | 75 | 125 | 75 | 75 |
| 2 Layer, 20, 10 Nodes | ACC+STD | 85.93% (+/- 8.57%) | 91.49% (+/- 7.94%) | 89.86% (+/- 7.81%) | 91.90% (+/- 8.85%) |
| CI + Range | 85.93% (+/- 6.46%) | 91.49% (+/- 5.99%) | 89.86% (+/- 5.89%) | 91.90% (+/- 6.67%) |
| Number of Features | 25 | 100 | 50 | 200 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 6: mixed/dysexecutive MCI vs Alzheimer’s Disease** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 79.39% (+/- 8.05%) | 82.43% (+/- 11.38%) | 81.12% (+/- 8.89%) | 84.62% (+/- 10.03%) |
| CI + Range | 79.39% (+/- 6.07%) | 82.43% (+/- 8.58%) | 81.12% (+/- 6.71%) | 84.62% (+/- 7.56%) |
| Number of Features | 75 | 100 | 100 | 25 |
| 2 Layer, 10 Nodes | ACC+STD | 78.62% (+/- 6.85%) | 82.14% (+/- 6.33%) | 81.41% (+/- 8.80%) | 83.91% (+/- 12.85%) |
| CI + Range | 78.62% (+/- 5.16%) | 82.14% (+/- 4.77%) | 81.41% (+/- 6.64%) | 83.91% (+/- 9.69%) |
| Number of Features | 25 | 100 | 125 | 25 |
| 2 Layer, 20, 10 Nodes | ACC+STD | 80.39% (+/- 9.75%) | 85.07% (+/- 10.30%) | 84.05% (+/- 8.14%) | 82.34% (+/- 8.25%) |
| CI + Range | 80.39% (+/- 7.35%) | 85.07% (+/- 7.76%) | 84.05% (+/- 6.14%) | 82.34% (+/- 6.22%) |
| Number of Features | 150 | 100 | 125 | 12 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 7: non-MCI vs amnestic MCI vs mx/dys MCI** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 67.66% (+/- 8.59%) | 69.75% (+/- 10.30%) | 71.64% (+/- 8.56%) | 66.50% (+/- 13.17%) |
| CI + Range | 67.66% (+/- 6.48%) | 69.75% (+/- 7.77%) | 71.64% (+/- 6.46%) | 66.50% (+/- 9.93%) |
| Number of Features | 75 | 75 | 125 | 50 |
| 2 Layer, 10 Nodes | ACC+STD | 68.03% (+/- 9.77%) | 64.37% (+/- 12.45%) | 62.43% (+/- 10.07%) | 69.05% (+/- 15.43%) |
| CI + Range | 68.03% (+/- 7.36%) | 64.37% (+/- 9.39%) | 62.43% (+/- 7.59%) | 69.05% (+/- 11.64%) |
| Number of Features | 75 | 75 | 100 | 50 |
| 2 Layer, 20 Node and 10 Node | ACC+STD | 65.71% (+/- 10.79%) | 66.15% (+/- 11.87%) | 67.76% (+/- 14.48%) | 67.56% (+/- 12.16%) |
| CI + Range | 65.71% (+/- 8.13%) | 66.15% (+/- 8.95%) | 67.76% (+/- 10.92%) | 67.56% (+/- 9.17%) |
| Number of Features | 75 | 50 | 75 | 100 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 8: amnestic MCI vs mx/dys MCI vs Alzheimer’s Disease** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 75.97% (+/- 8.21%) | 73.00% (+/- 12.51%) | 73.83% (+/- 8.78%) | 72.06% (+/- 9.14%) |
| CI + Range | 75.97% (+/- 6.19%) | 73.00% (+/- 9.43%) | 73.83% (+/- 6.62%) | 72.06% (+/- 6.89%) |
| Number of Features | 50 | 125 | 125 | 275 |
| 2 Layer, 10 Nodes | ACC+STD | 74.14% (+/- 8.40%) | 72.06% (+/- 11.29%) | 69.06% (+/- 9.62%) | 73.32% (+/- 8.77%) |
| CI + Range | 74.14% (+/- 6.33%) | 72.06% (+/- 8.51%) | 69.06% (+/- 7.26%) | 73.32% (+/- 6.62%) |
| Number of Features | 100 | 100 | 100 | 225 |
| 2 Layer, 20 Node and 10 Node | ACC+STD | 71.69% (+/- 8.93%) | 71.51% (+/- 13.31%) | 67.16% (+/- 6.62%) | 72.35% (+/- 13.00%) |
| CI + Range | 71.69% (+/- 6.74%) | 71.51% (+/- 10.04%) | 67.16% (+/- 4.99%) | 72.35% (+/- 9.81%) |
| Number of Features | 100 | 125 | 75 | 100 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 9: non-MCI vs amnestic MCI vs mixed/dysexecutive****MCI vs Alzheimer’s Disease** |
| Network Parameters | DATA | MI | MRMR | JMI | CMIM |
| 1 Layer, 50 Nodes | ACC+STD | 64.05% (+/- 6.52%) | 64.71% (+/- 7.70%) | 64.25% (+/- 13.44%) | 65.69% (+/- 10.14%) |
| CI + Range | 64.05% (+/- 4.92%) | 64.71% (+/- 5.81%) | 64.25% (+/- 10.14%) | 65.69% (+/- 7.64%) |
| Number of Features | 100 | 75 | 75 | 225 |
| 2 Layer, 10 Nodes | ACC+STD | 65.08% (+/- 10.32%) | 63.32% (+/- 11.58%) | 62.38% (+/- 8.26%) | 66.33% (+/- 9.96%) |
| CI + Range | 65.08% (+/- 7.78%) | 63.32% (+/- 8.73%) | 62.38% (+/- 6.23%) | 66.33% (+/- 7.51%) |
| Number of Features | 150 | 125 | 75 | 200 |
| 2 Layer, 20 Node and 10 Node | ACC+STD | 64.27% (+/- 10.36%) | 63.98% (+/- 12.05%) | 61.84% (+/- 12.66%) | 64.26% (+/- 12.57%) |
| CI + Range | 64.27% (+/- 7.81%) | 63.98% (+/- 9.09%) | 61.84% (+/- 9.55%) | 64.26% (+/- 9.48%) |
| Number of Features | 125 | 100 | 50 | 200 |
| ACC= accuracy; STD= standard deviation; CI= confidence interval; MI= mutual information; MRMR= minimum redundancy maximum relevancy, JMI= joint mutual information; CMIM= conditional mutual information maximization |

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| **Supplemental Table 10: Top 20 features selected for each 2-, 3- and 4-group classification using Mutual Information (MI)** |
| **4-group classification** | **Non-MCI vs aMCI** | **Non-MCI vs mxMCI** | **Non-MCI vs AD** | **aMCI vs mxMCI** |
| Cmd: # of strokes to draw the 11 | Cmd: Total length of ink drawn | Cmd: # of strokes to draw the 11 | Cmd: # of strokes to draw the 11 | Cmd: Time taken to draw the 5 |
| Copy: total # of strokes | Cmd: Amount of time taken to draw third quarter of the total ink, when clock face is included | Copy: The Y coordinate of the center of the bounding box surrounding the 2 | Copy: total # of strokes | Cmd: Amount of time taken to draw third quarter of the total ink, when clock face is included |
| Cmd: Total length of ink drawn | Copy: total # of strokes | Copy: The Y coordinate of the center of the bounding box surrounding the 11 | Cmd: the number of degrees by which the 9’s angular position differs from its ideal placement | Cmd: Whether the 9 is inside (0) or outside (1) the clock face |
| Cmd: Distance from innermost to outermost point on the 1st minute hand stroke divided by the radius of the clock face | Copy: # of strokes to draw the 3 | Copy: Symmetry of the ellipse fitted to the first clock face, measured as the average distance between corresponding points on the top and bottom of the ellipse | Cmd: the time elapsed between drawing the second of the two hand and whatever was drawn immediately before  | Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 9 |
| Cmd: Distance from inner end of hand to center of ellipse -- 1st minute hand | Cmd: Amount of time taken to draw fourth quarter of the total ink, when clock face is included | Cmd: Whether the 11 is inside (0) or outside (1) the clock face | Copy: # of strokes to draw the 11 | Cmd: # of strokes to draw the 4 |
| Cmd: How many digits were used to calculate the average time lag between drawing digits | Copy: The Y coordinate of the center of the bounding box surrounding the 10 | Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 11 | Copy: the average time elapsed between drawing one anchor digit and the next | Cmd: Time taken to draw the 6 |
| Copy: # of strokes to draw the 3 | Cmd: the number of degrees by which the 8’s angular position differs from its ideal placement | Cmd: The width of the bounding box for the 10 | Cmd: Time taken to draw the 5 | Cmd: the number of degrees by which the 12’s angular position differs from its ideal placement |
| Cmd: Time taken to draw the 5 | Cmd: The X coordinate of the center of the bounding box surrounding the 12 | Cmd: Distance from innermost to outermost point on the 1st minute hand stroke divided by the radius of the clock face | Cmd: Distance from inner end of hand to center of ellipse -- 1st hour hand | Copy: Angle between 1st minute hand and line from base of hand to nearest 2 |
| Copy: Distance from inner end of hand to center of ellipse -- 1st minute hand | Cmd: the number of degrees by which the 10’s angular position differs from its ideal placement | Copy: The distance from the center of 7’s bounding box to the closest point on the clock face circle  | Copy: Distance from inner end of hand to center of ellipse -- 1st minute hand | Copy: The distance from the center of the 11’s bounding box to the closest point on the clock face circle  |
| Copy: Time taken to draw the 4 | Cmd: Total number of strokes used to draw the clock face | Copy:# of strokes to draw the 3 | Cmd: the average time elapsed between drawing one anchor digit and the next | Cmd: # of strokes to draw the clock face |
| Cmd: Amount of time taken to draw third quarter of the total ink, when clock face is included | Copy: Total length of ink drawn | Copy:# of strokes to draw the 5 | Copy: Time taken to draw the 4 | Cmd: Distance from inner end of hand to center of ellipse -- 1st minute hand |
| Cmd: the height of the bounding box for the 12 divided by the radius of the clock face | Copy: Angle between minute hand and line from base of hand to nearest 2 | Copy: Time taken to draw the 5 | Copy: Time taken to draw the 5 | Copy: the number of degrees by which the 10’s angular position differs from its ideal placement |
| Cmd: the number of degrees by which the 9’s angular position differs from its ideal placement  | Cmd: Time taken to draw the 5 | Copy: Distance from innermost to outermost point on the 1st minute hand stroke divided by the radius of the clock face | Copy: Time taken to draw the 7 | Copy: The Y coordinate of the center of the bounding box surrounding the 6 |
| Cmd: the number of degrees by which the 10’s angular position differs from its ideal placement | Copy: The X coordinate of the center of the bounding box surrounding the 8 | Cmd: The angle from the center of the fitted ellipse to the center of the bounding box of the 7 | Cmd: The number of degrees by which the 10’s angular position differs from its ideal placement | Cmd: The height of the bounding box for the 8 divided by the radius of the clock face |
| Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 9  | Copy: The X coordinate of the center of the bounding box surrounding the 7 | Cmd: Whether the 7 is inside (0) or outside (1) the clock face | Cmd: The X coordinate of the center of the bounding box surrounding the  | Copy: Time taken to draw the 4 |
| Cmd: Whether the 9 is inside (0) or outside (1) the clock face | Cmd: Time taken to draw the 10 | Copy: The Y coordinate of the center of the bounding box surrounding the 1 | Cmd: The X coordinate of the center of the bounding box surrounding the 12 | Cmd: Total length of ink drawn |
| Cmd: The X coordinate of the center of the bounding box surrounding the 4 | Cmd: total time to draw the clock | Cmd: the number of degrees by which the 7’s angular position differs from its ideal placement | Cmd: # of strokes to draw the 8 | Cmd: Time taken to draw the 10 |
| Cmd:# of strokes to draw the 4 | Cmd: # of strokes to draw the 11 | Cmd: Total length of ink drawn | Cmd: Distance from inner end of hand to center of ellipse – 1st minute hand | Cmd: The width of the bounding box for the 9 |
| Copy: the number of degrees by which the 9’s angular position differs from its ideal placement | Cmd: Whether the 4 is inside (0) or outside (1) the clock face | Copy: Time taken to draw the 4 | Copy: The number of strokes used to draw the center dot | Copy: The total length of the strokes used to draw the center dot  |
| Copy: the distance from the center of 1’s bounding box to the closest point on the clock face circle  | Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 4 | Copy:# of strokes to draw the 8 | Copy: # of strokes to draw the 6 | Cmd: the number of degrees by which the 7’s angular position differs from its ideal placement |
| MCI= mild cognitive impairment; aMCI= amnestic mild cognitive impairment; mxMCI= mixed/dysexecutive mild cognitive impairment; AD= Alzheimer’s disease;\*Features are selected based on mutual information and should be interpreted as part of a set of features. Each feature is not independently and equally relevant. Features contribute to diagnostic prediction only as a set / group with each feature’s relative importance determined by the trained weights of the classifier (neural network). |

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| **Supplemental Table 10: Top 20 features selected for each 2-, 3- and 4-group classification using Mutual Information (MI) (Continued)** |
| **aMCI vs AD** | **mxMCI vs AD** | **Non-MCI vs aMCI vs mxMCI** | **aMCI vs mxMCI vs AD** |
| Copy: The width of the bounding box for the 8 | Cmd: The X coordinate of the center of the bounding box surrounding the 4 | Cmd: Amount of time taken to draw third quarter of the total ink, when clock face is included | Cmd: Distance from inner end of hand to center of ellipse -- 1st minute hand |
| Copy: The width of the bounding box for the 5 | Cmd: Distance from inner end of hand to center of ellipse -- 1st minute hand | Cmd: # of strokes to draw the 11 | Cmd: Distance from innermost to outermost point on the 1st Hour Hand stroke divided by the radius of the clock face |
| Cmd: Total length of ink drawn | Cmd: The X coordinate of the center of the bounding box surrounding the 5 | Cmd: Whether the 9 is inside (0) or outside (1) the clock face | Cmd: The X coordinate of the center of the bounding box surrounding the 4 |
| Copy: The Y coordinate of the center of the bounding box surrounding the 12 | Copy: The distance from the center of the 9’s bounding box to the closest point on the clock face circle  | Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 9 | Cmd: Time taken to draw the 10 |
| Copy: total # of strokes | Cmd: Distance from innermost to outermost point on the 1st Hour Hand stroke divided by the radius of the clock face | Cmd: Total length of ink drawn | Cmd: Total length of ink drawn |
| Cmd: Copy: the number of degrees by which the 6’s angular position differs from its ideal placement | Cmd: The minimum distance between the start of first clock face stroke(s) and the end, divided by the total length of the stroke  | Cmd: Time taken to draw the 5 | Cmd: Copy: the number of degrees by which the 12’s angular position differs from its ideal placement |
| Copy: The Y coordinate of the center of the bounding box surrounding the 10 | Cmd: The total length of the strokes used to draw the center dot | Copy: The distance from the center of the 9’s bounding box to the closest point on the clock face circle | Cmd: The X coordinate of the center of the bounding box surrounding the 5 |
| Cmd: Distance from inner end of hand to center of ellipse -- 1st hour hand | Cmd: The distance from the center of the 11’s bounding box to the closest point on the clock face circle  | Copy: Distance from innermost to outermost point on the 1st minute hand stroke divided by the radius of the clock face | Copy: The height of the bounding box for the 8 divided by the radius of the clock face |
| Cmd: # of strokes to draw the 2 | Cmd: The average latency between drawing all digits | Cmd: The distance from the center of the 10’s bounding box to the closest point on the clock face circle  | Copy: The average latency between drawing all digits |
| Cmd: The height of the bounding box for the 4 divided by the radius of the clock face | Copy: # of strokes to draw the 3 | Cmd: The width of the bounding box for the 10 | Copy: The width of the bounding box for the 8 |
| Copy: The average time elapsed between drawing one anchor digit and the next | Cmd: Copy: The width of the bounding box for the 7 | Copy: The height of the bounding box for the 1 divided by the radius of the clock face | Copy: The distance from the center of the 11’s bounding box to the closest point on the clock face circle  |
| Cmd: Time taken to draw the 5 | Cmd: The distance from the center of the 12’s bounding box to the closest point on the clock face circle  | Copy: Symmetry of the ellipse fitted to the first clock face, measured as the average distance between corresponding points on the top and bottom of the ellipse | Cmd: # of strokes to draw the 4 |
| Cmd: Time taken to draw the 10 | Cmd: the number of degrees by which the 4’s angular position differs from its ideal placement | Cmd: Total number of strokes used to draw the clock face | Copy: the time elapsed between drawing the second of the two hand and whatever was drawn immediately before |
| Copy: The height of the bounding box for the 1 divided by the radius of the clock face | Copy: Total time to draw the first clock face | Cmd: the number of degrees by which the 10’s angular position differs from its ideal placement | Cmd: Time taken to draw the 5 |
| Copy: Angle between 1st HH and line from base of hand to nearest 11  | Copy: The average latency between drawing all digits | Cmd: Time taken to draw the 10 | Copy: Time taken to draw the 4 |
| Cmd: the angle from the center of the fitted ellipse to the center of the bounding box of the 8 | Copy: the number of degrees by which the 9’s angular position differs from its ideal placement | Copy: total # of strokes | Cmd: Time taken to draw the 7 |
| Cmd: Whether the 8 is inside (0) or outside (1) the clock face | Copy: The distance from the center of the 6’s bounding box to the closest point on the clock face circle  | Copy: Time taken to draw the 4 | Copy: # of strokes to draw the 3 |
| Cmd: # of strokes to draw the 11 | Copy: the number of degrees by which the 1’s angular position differs from its ideal placement | Cmd: # of strokes to draw the 4 | Copy: total # of strokes |
| Copy: The X coordinate of the center of the bounding box surrounding the 1 | Cmd: The height of the bounding box for the 7 divided by the radius of the clock face | Cmd: Distance from innermost to outermost point on the 1st minute hand stroke divided by the radius of the clock face | Cmd: # of strokes to draw the 11 |
| Cmd: Amount of time taken to draw third quarter of the total ink, when clock face is included | Copy: Number of degrees between start & end of longest stroke in first clock face, measured from center of ellipse  | Copy: the time elapsed between drawing the first of the two hand and whatever was drawn immediately before | Cmd: the number of degrees by which the 6’s angular position differs from its ideal placement |
| MCI= mild cognitive impairment; aMCI= amnestic mild cognitive impairment; mxMCI= mixed/dysexecutive mild cognitive impairment; AD= Alzheimer’s disease;\*Features are selected based on mutual information and should be interpreted as part of a set of features. Each feature is not independently and equally relevant. Features contribute to diagnostic prediction only as a set / group with each feature’s relative importance determined by the trained weights of the classifier (neural network). |