

Appendix on all confusion matrices supporting the analysis

Name Similarity Cluster of Size 5

| PREDICT | *** BASE LINE *** | 391 GROUND TRUTHS | | | |
|---------|----------------------|-------------------|-------------------|-----------------------|-------------------------------|
| | | GT. Pos. 272 | GT. neg. 119 | | |
| | POSITIVE 391 | True Pos. 272 | False Pos. 119 | Precision 0.696 | False Discovery Rate 0.304 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.696 |

| | | | | |
|--|--|--|--|--------------------------------------|
| | | | | F1 score — Accuracy 0.821 — 0.696 |
|--|--|--|--|--------------------------------------|

Table 9: Confusion matrix for link-networks of size 5 (MCC).

| PREDICT | *** BASE LINE *** | 391 GROUND TRUTHS | | | |
|---------|----------------------|-------------------|------------------|---------------------------|--------------------------------|
| | | GT. Pos. 272 | GT. neg. 119 | | |
| | POSITIVE 289 | True Pos. 231 | False Pos. 58 | Precision 0.799 | False Discovery Rate 0.201 |
| | NEGATIVE 102 | False Neg. 41 | True Neg. 61 | F. Omission Rate 0.402 | Neg. Predictive Value 0.598 |
| | | | Recall 0.849 | Fall-out 0.487 | Positive L. Ratio 1.641 |

| | | | | |
|--|--|--|--|--------------------------------------|
| | | | | F1 score — Accuracy 0.824 — 0.747 |
|--|--|--|--|--------------------------------------|

Table 10: Confusion matrix for link-networks of size 5 (Evaluation).

Name Similarity Cluster of Size 6

| PREDICT | *** BASE LINE *** | 224 GROUND TRUTHS | | | |
|---------|----------------------|-------------------|------------------|-----------------------|-------------------------------|
| | | GT. Pos. 139 | GT. neg. 85 | | |
| | POSITIVE 224 | True Pos. 139 | False Pos. 85 | Precision 0.621 | False Discovery Rate 0.379 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.621 |

| | | | | |
|--|--|--|--|--------------------------------------|
| | | | | F1 score — Accuracy 0.766 — 0.621 |
|--|--|--|--|--------------------------------------|

Table 11: Confusion matrix for link-networks of size 6 (MCC).

| PREDICT | *** BASE LINE *** | 224 GROUND TRUTHS | | | |
|---------|----------------------|-------------------|------------------|---------------------------|--------------------------------|
| | | GT. Pos. 139 | GT. neg. 85 | | |
| | POSITIVE 145 | True Pos. 116 | False Pos. 29 | Precision 0.8 | False Discovery Rate 0.2 |
| | NEGATIVE 79 | False Neg. 23 | True Neg. 56 | F. Omission Rate 0.291 | Neg. Predictive Value 0.709 |
| | | | Recall 0.835 | Fall-out 0.341 | Positive L. Ratio 2.346 |

| | | | | |
|--|--|--|--|--------------------------------------|
| | | | | F1 score — Accuracy 0.817 — 0.768 |
|--|--|--|--|--------------------------------------|

Table 12: Confusion matrix for link-networks of size 6 (Evaluation).

Name Similarity Cluster of Size 7

| | | 96 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|------------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 50 | 46 | | |
| PREDICT | POSITIVE 96 | True Pos. 50 | False Pos. 46 | Precision 0.521 | False Discovery Rate 0.479 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.521 | F1 score — Accuracy 0.685 — 0.521 |

Table 13: Confusion matrix for link-networks of size 7 (MCC).

| | | 96 GROUND TRUTHS | | | |
|---------|----------------|------------------|-------------------|---------------------------|--------------------------------------|
| | | GT. Pos. 50 | GT. neg. 46 | | |
| PREDICT | POSITIVE 54 | True Pos. 42 | False Pos. 12 | Precision 0.778 | False Discovery Rate 0.222 |
| | NEGATIVE 42 | False Neg. 8 | True Neg. 34 | F. Omission Rate 0.19 | Neg. Predictive Value 0.81 |
| | | Recall 0.84 | Fall-out 0.261 | Positive L. Ratio 2.98 | F1 score — Accuracy 0.808 — 0.792 |

Table 14: Confusion matrix for link-networks of size 7 (Evaluation).

Name Similarity Cluster of Size 8

| | | 66 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|------------------|---------------------------|-------------------------------------|
| | | GT. Pos. 35 | GT. neg. 31 | | |
| *** BASE LINE *** | | 35 | 31 | | |
| PREDICT | POSITIVE 66 | True Pos. 35 | False Pos. 31 | Precision 0.53 | False Discovery Rate 0.47 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.53 | F1 score — Accuracy 0.693 — 0.53 |

Table 15: Confusion matrix for link-networks of size 8 (MCC).

| | | 66 GROUND TRUTHS | | | |
|---------|----------------|------------------|-------------------|----------------------------|--------------------------------------|
| | | GT. Pos. 35 | GT. neg. 31 | | |
| PREDICT | POSITIVE 32 | True Pos. 27 | False Pos. 5 | Precision 0.844 | False Discovery Rate 0.156 |
| | NEGATIVE 34 | False Neg. 8 | True Neg. 26 | F. Omission Rate 0.235 | Neg. Predictive Value 0.765 |
| | | Recall 0.771 | Fall-out 0.161 | Positive L. Ratio 5.241 | F1 score — Accuracy 0.806 — 0.803 |

Table 16: Confusion matrix for link-networks of size 8 (Evaluation).

Name Similarity Cluster of Size 9

| | | 45 GROUND TRUTHS | | | |
|----------------------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 21 | 24 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 0 | 0 | 0 | - | - |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 45 | 21 | 24 | 0.467 | 0.533 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.0 | 0.0 | - | - — 0.533 |

Table 17: Confusion matrix for link-networks of size 9 (MCC).

| | | 45 GROUND TRUTHS | | | |
|---------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 21 | 24 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 26 | 21 | 5 | 0.808 | 0.192 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 19 | 0 | 19 | 0.0 | 1.0 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | 0.208 | 3.883 | 0.894 — 0.889 |

Table 18: Confusion matrix for link-networks of size 9 (Evaluation).

Name Similarity Cluster of Size 10

| | | 24 GROUND TRUTHS | | | |
|----------------------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 8 | 16 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 0 | 0 | 0 | - | - |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 24 | 8 | 16 | 0.333 | 0.667 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.0 | 0.0 | - | - — 0.667 |

Table 19: Confusion matrix for link-networks of size 10 (MCC).

| | | 24 GROUND TRUTHS | | | |
|---------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 8 | 16 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 7 | 7 | 0 | 1.0 | 0.0 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 17 | 1 | 16 | 0.059 | 0.941 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.875 | 0.0 | - | 0.933 — 0.958 |

Table 20: Confusion matrix for link-networks of size 10 (Evaluation).

Name Similarity Cluster of Size 3: MCC vs. Expert

| | | 64 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 56 | 8 | | |
| PREDICT | POSITIVE 64 | True Pos. 56 | False Pos. 8 | Precision 0.875 | False Discovery Rate 0.125 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.875 | F1 score — Accuracy 0.933 — 0.875 |

Table 21: Confusion matrix for link-networks of size 3 (MCC).

| | | 64 GROUND TRUTHS | | | |
|---------|----------------|------------------|------------------|--------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 56 | 8 | | |
| PREDICT | POSITIVE 60 | True Pos. 54 | False Pos. 6 | Precision 0.9 | False Discovery Rate 0.1 |
| | NEGATIVE 4 | False Neg. 2 | True Neg. 2 | F. Omission Rate 0.5 | Neg. Predictive Value 0.5 |
| | | Recall 0.964 | Fall-out 0.75 | Positive L. Ratio 1.2 | F1 score — Accuracy 0.931 — 0.875 |

Table 22: Confusion matrix for link-networks of size 3 (Expert).

Name Similarity Cluster of Size 4: MCC vs. Expert

| | | 24 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 19 | 5 | | |
| PREDICT | POSITIVE 24 | True Pos. 19 | False Pos. 5 | Precision 0.792 | False Discovery Rate 0.208 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.792 | F1 score — Accuracy 0.884 — 0.792 |

Table 23: Confusion matrix for link-networks of size 4 (MCC).

| | | 24 GROUND TRUTHS | | | |
|---------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 19 | 5 | | |
| PREDICT | POSITIVE 22 | True Pos. 18 | False Pos. 4 | Precision 0.818 | False Discovery Rate 0.182 |
| | NEGATIVE 2 | False Neg. 1 | True Neg. 1 | F. Omission Rate 0.5 | Neg. Predictive Value 0.5 |
| | | Recall 0.947 | Fall-out 0.8 | Positive L. Ratio 1.023 | F1 score — Accuracy 0.878 — 0.792 |

Table 24: Confusion matrix for link-networks of size 4 (Expert).

Name Similarity Cluster of Size 5: MCC vs. Expert

| | | 15 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 14 | 1 | | |
| PREDICT | POSITIVE 15 | True Pos. 14 | False Pos. 1 | Precision 0.933 | False Discovery Rate 0.067 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.933 | F1 score — Accuracy 0.966 — 0.933 |

Table 25: Confusion matrix for link-networks of size 5 (MCC).

| | | 15 GROUND TRUTHS | | | |
|---------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 14 | 1 | | |
| PREDICT | POSITIVE 14 | True Pos. 13 | False Pos. 1 | Precision 0.929 | False Discovery Rate 0.071 |
| | NEGATIVE 1 | False Neg. 1 | True Neg. 0 | F. Omission Rate 1.0 | Neg. Predictive Value 0.0 |
| | | Recall 0.929 | Fall-out 1.0 | Positive L. Ratio 0.929 | F1 score — Accuracy 0.929 — 0.867 |

Table 26: Confusion matrix for link-networks of size 5 (Expert).

Name Similarity Cluster of Size 6: MCC vs. Expert

| | | 19 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 14 | 5 | | |
| PREDICT | POSITIVE 19 | True Pos. 14 | False Pos. 5 | Precision 0.737 | False Discovery Rate 0.263 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.737 | F1 score — Accuracy 0.848 — 0.737 |

Table 27: Confusion matrix for link-networks of size 6 (MCC).

| | | 19 GROUND TRUTHS | | | |
|---------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 14 | 5 | | |
| PREDICT | POSITIVE 19 | True Pos. 14 | False Pos. 5 | Precision 0.737 | False Discovery Rate 0.263 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.737 | F1 score — Accuracy 0.848 — 0.737 |

Table 28: Confusion matrix for link-networks of size 6 (Expert).

Name Similarity Cluster of Size 7: MCC vs. Expert

| | | 12 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|----------------------------|--------------------------------------|
| *** BASE LINE *** | | GT. Pos. 10 | GT. neg. 2 | | |
| PREDICT | POSITIVE 12 | True Pos. 10 | False Pos. 2 | Precision 0.833 | False Discovery Rate 0.167 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.833 | F1 score — Accuracy 0.909 — 0.833 |

Table 29: Confusion matrix for link-networks of size 7 (MCC).

| | | 12 GROUND TRUTHS | | | |
|---------|----------------|------------------|-----------------|-------------------------|----------------------------------|
| | | GT. Pos. 10 | GT. neg. 2 | | |
| PREDICT | POSITIVE 10 | True Pos. 10 | False Pos. 0 | Precision 1.0 | False Discovery Rate 0.0 |
| | NEGATIVE 2 | False Neg. 0 | True Neg. 2 | F. Omission Rate 0.0 | Neg. Predictive Value 1.0 |
| | | Recall 1.0 | Fall-out 0.0 | Positive L. Ratio - | F1 score — Accuracy 1.0 — 1.0 |

Table 30: Confusion matrix for link-networks of size 7 (Expert).

Name Similarity Cluster of Size 8: MCC vs. Expert

| | | 4 GROUND TRUTHS | | | |
|----------------------|---------------|-----------------|-----------------|------------------------|----------------------------------|
| *** BASE LINE *** | | GT. Pos. 4 | GT. neg. 0 | | |
| PREDICT | POSITIVE 4 | True Pos. 4 | False Pos. 0 | Precision 1.0 | False Discovery Rate 0.0 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out - | Positive L. Ratio - | F1 score — Accuracy 1.0 — 1.0 |

Table 31: Confusion matrix for link-networks of size 8 (MCC).

| | | 4 GROUND TRUTHS | | | |
|---------|---------------|-----------------|-----------------|------------------------|----------------------------------|
| | | GT. Pos. 4 | GT. neg. 0 | | |
| PREDICT | POSITIVE 4 | True Pos. 4 | False Pos. 0 | Precision 1.0 | False Discovery Rate 0.0 |
| | NEGATIVE 0 | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out - | Positive L. Ratio - | F1 score — Accuracy 1.0 — 1.0 |

Table 32: Confusion matrix for link-networks of size 8 (Expert).

Name Similarity Cluster of Size 9: MCC vs. Expert

| | | 9 GROUND TRUTHS | | | |
|----------------------|----------|-----------------|------------|-------------------|-----------------------|
| *** BASE LINE *** | | GT. Pos. | GT. neg. | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 9 | 8 | 1 | 0.889 | 0.111 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 0 | 0 | 0 | - | - |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | 1.0 | 0.889 | 0.941 — 0.889 |

Table 33: Confusion matrix for link-networks of size 9 (MCC).

| | | 9 GROUND TRUTHS | | | |
|---------|----------|-----------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 8 | 8 | 0 | 1.0 | 0.0 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 1 | 0 | 1 | 0.0 | 1.0 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | 0.0 | - | 1.0 — 1.0 |

Table 34: Confusion matrix for link-networks of size 9 (Expert).

Name Similarity Cluster of Size 10: MCC vs. Expert

| | | 1 GROUND TRUTHS | | | |
|----------------------|----------|-----------------|------------|-------------------|-----------------------|
| *** BASE LINE *** | | GT. Pos. | GT. neg. | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 1 | 1 | 0 | 1.0 | 0.0 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 0 | 0 | 0 | - | - |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | - | - | 1.0 — 1.0 |

Table 35: Confusion matrix for link-networks of size 10 (MCC).

| | | 1 GROUND TRUTHS | | | |
|---------|----------|-----------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 1 | 1 | 0 | 1.0 | 0.0 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 0 | 0 | 0 | - | - |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | - | - | 1.0 — 1.0 |

Table 36: Confusion matrix for link-networks of size 10 (Expert).

50 meters proximity

| | | 92 GROUND TRUTHS | | | |
|----------------------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 30 | 62 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 0 | 0 | 0 | - | - |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 92 | 30 | 62 | 0.326 | 0.674 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.0 | 0.0 | - | - — 0.674 |

Table 37: Confusion matrix for link-networks of size 3, 50m before (MCC).

| | | 92 GROUND TRUTHS | | | |
|---------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 30 | 62 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 45 | 26 | 19 | 0.578 | 0.422 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 47 | 4 | 43 | 0.085 | 0.915 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.867 | 0.306 | 1.888 | 0.693 — 0.75 |

Table 38: Confusion matrix for link-networks of size 3, 50m before (Evaluation).

50 meters proximity + name

| | | 31 GROUND TRUTHS | | | |
|----------------------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 27 | 4 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 31 | 27 | 4 | 0.871 | 0.129 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 0 | 0 | 0 | - | - |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | 1.0 | 0.871 | 0.931 — 0.871 |

Table 39: Confusion matrix for link-networks of size 3, 50m after (MCC).

| | | 31 GROUND TRUTHS | | | |
|---------|----------|------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 27 | 4 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 19 | 19 | 0 | 1.0 | 0.0 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 12 | 8 | 4 | 0.667 | 0.333 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.704 | 0.0 | - | 0.826 — 0.742 |

Table 40: Confusion matrix for link-networks of size 3, 50m after (Evaluation).

50 meters proximity: all remain the same except this

| | | 92 GROUND TRUTHS | | | |
|----------------------|----------------|------------------|-----------------|---------------------------|----------------------------------|
| *** BASE LINE *** | | GT. Pos. 31 | GT. neg. 61 | | |
| PREDICT | POSITIVE 0 | True Pos. 0 | False Pos. 0 | Precision - | False Discovery Rate - |
| | NEGATIVE 92 | False Neg. 31 | True Neg. 61 | F. Omission Rate 0.337 | Neg. Predictive Value 0.663 |
| | | Recall 0.0 | Fall-out 0.0 | Positive L. Ratio - | F1 score — Accuracy - — 0.663 |

Table 41: Confusion matrix for link-networks of size 3, 50m before (MCC).

| | | 92 GROUND TRUTHS | | | |
|---------|----------------|------------------|-------------------|----------------------------|--------------------------------------|
| | | GT. Pos. 31 | GT. neg. 61 | | |
| PREDICT | POSITIVE 45 | True Pos. 27 | False Pos. 18 | Precision 0.6 | False Discovery Rate 0.4 |
| | NEGATIVE 47 | False Neg. 4 | True Neg. 43 | F. Omission Rate 0.085 | Neg. Predictive Value 0.915 |
| | | Recall 0.871 | Fall-out 0.295 | Positive L. Ratio 2.034 | F1 score — Accuracy 0.711 — 0.761 |

Table 42: Confusion matrix for link-networks of size 3, 50m before (Expert).

500 meters proximity

| | | 249 GROUND TRUTHS | | | |
|----------------------|----------|-------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 66 | 183 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 0 | 0 | 0 | - | - |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 249 | 66 | 183 | 0.265 | 0.735 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.0 | 0.0 | - | - — 0.735 |

Table 43: Confusion matrix for link-networks of size 3, 500m before (MCC).

| | | 249 GROUND TRUTHS | | | |
|---------|----------|-------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 66 | 183 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 115 | 63 | 52 | 0.548 | 0.452 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 134 | 3 | 131 | 0.022 | 0.978 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.955 | 0.284 | 1.929 | 0.696 — 0.779 |

Table 44: Confusion matrix for link-networks of size 3, 500m before (Evaluation).

500 meters proximity + name

| | | 155 GROUND TRUTHS | | | |
|----------------------|----------|-------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 148 | 7 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 155 | 148 | 7 | 0.955 | 0.045 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 0 | 0 | 0 | - | - |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 1.0 | 1.0 | 0.955 | 0.977 — 0.955 |

Table 45: Confusion matrix for link-networks of size 3, 500m after (MCC).

| | | 155 GROUND TRUTHS | | | |
|---------|----------|-------------------|------------|-------------------|-----------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 148 | 7 | | |
| PREDICT | POSITIVE | True Pos. | False Pos. | Precision | False Discovery Rate |
| | 127 | 125 | 2 | 0.984 | 0.016 |
| | NEGATIVE | False Neg. | True Neg. | F. Omission Rate | Neg. Predictive Value |
| | 28 | 23 | 5 | 0.821 | 0.179 |
| | | Recall | Fall-out | Positive L. Ratio | F1 score — Accuracy |
| | | 0.845 | 0.286 | 3.441 | 0.909 — 0.839 |

Table 46: Confusion matrix for link-networks of size 3, 500m after (Evaluation).

2000 meters proximity

| | | 198 GROUND TRUTHS | | | |
|----------------------|----------|-------------------|------------------|---------------------------|----------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 61 | 137 | | |
| PREDICT | POSITIVE | True Pos. 0 | False Pos. 0 | Precision - | False Discovery Rate - |
| | NEGATIVE | False Neg. 61 | True Neg. 137 | F. Omission Rate 0.308 | Neg. Predictive Value 0.692 |
| | | Recall 0.0 | Fall-out 0.0 | Positive L. Ratio - | F1 score — Accuracy - — 0.692 |

Table 47: Confusion matrix for link-networks of size 3, 2 km before (MCC).

| | | 198 GROUND TRUTHS | | | |
|---------|----------|-------------------|-------------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 61 | 137 | | |
| PREDICT | POSITIVE | True Pos. 57 | False Pos. 24 | Precision 0.704 | False Discovery Rate 0.296 |
| | NEGATIVE | False Neg. 4 | True Neg. 113 | F. Omission Rate 0.034 | Neg. Predictive Value 0.966 |
| | | Recall 0.934 | Fall-out 0.175 | Positive L. Ratio 4.021 | F1 score — Accuracy 0.803 — 0.859 |

Table 48: Confusion matrix for link-networks of size 3, 2 km before (Evaluation).

2000 meters proximity + name

| | | 342 GROUND TRUTHS | | | |
|----------------------|----------|-------------------|------------------|----------------------------|-------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| *** BASE LINE *** | | 322 | 20 | | |
| PREDICT | POSITIVE | True Pos. 322 | False Pos. 20 | Precision 0.942 | False Discovery Rate 0.058 |
| | NEGATIVE | False Neg. 0 | True Neg. 0 | F. Omission Rate - | Neg. Predictive Value - |
| | | Recall 1.0 | Fall-out 1.0 | Positive L. Ratio 0.942 | F1 score — Accuracy 0.97 — 0.942 |

Table 49: Confusion matrix for link-networks of size 3, 2 km after (MCC).

| | | 342 GROUND TRUTHS | | | |
|---------|----------|-------------------|------------------|----------------------------|--------------------------------------|
| | | GT. Pos. | GT. neg. | | |
| | | 322 | 20 | | |
| PREDICT | POSITIVE | True Pos. 274 | False Pos. 5 | Precision 0.982 | False Discovery Rate 0.018 |
| | NEGATIVE | False Neg. 48 | True Neg. 15 | F. Omission Rate 0.762 | Neg. Predictive Value 0.238 |
| | | Recall 0.851 | Fall-out 0.25 | Positive L. Ratio 3.928 | F1 score — Accuracy 0.912 — 0.845 |

Table 50: Confusion matrix for link-networks of size 3, 2 km after (Evaluation).