

Figure 7: The distribution of the FPR of the BlindMI-Diff-w/ [24].

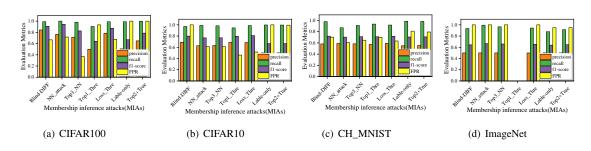


Figure 8: The evaluation of the existing MI attacks (e.g., the attacker-side precision, recall, f1-score and FPR).

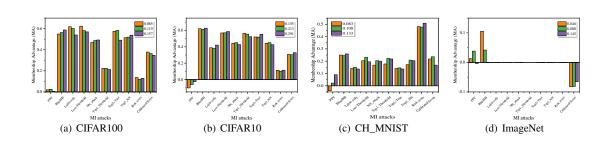


Figure 9: The effect of differential distance between two datasets on the Membership Advantage.

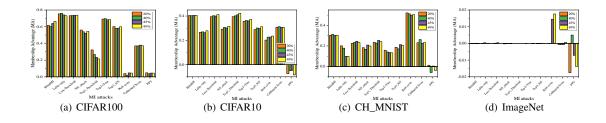


Figure 10: The effect of the ratio of the samples that are made no inferences by an MI attack.

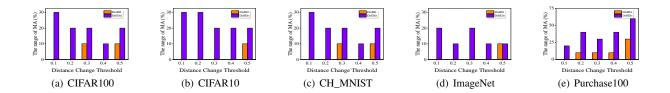


Figure 11: The comparisions of the effect of the distance between data samples of the target dataset (DisBD) and the differential difference between two datasets (DiffDis) on MA.

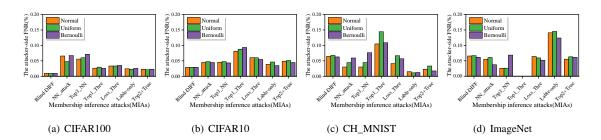


Figure 12: The attacker-side FNR of the distance distribution of the target datasets obeying normal, uniform and bernoulli distributions.

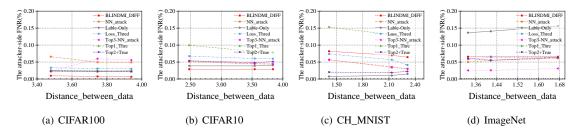


Figure 13: The effect of the distance between data samples in the target dataset on the attacker-side FNR.

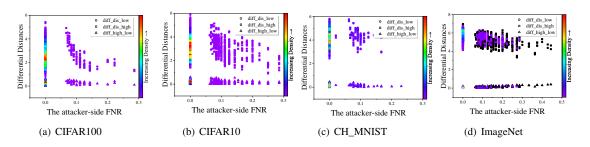


Figure 14: The effect of the differential distance between two datasets on attacker-side FNR.

Table 10: The average distance between data samples (DisBD) and the differential distance between two datasets (DiffDis) change on the MA (C_MA).

| Dataset | C_MA | average DisBD | average DiffDis |
|----------|------|---------------|-----------------|
| CIFAR100 | 10% | 0.143 | 0.107 |
| | 20% | 0.230 | 0.099 |
| | 30% | 0.349 | 0.138 |
| | 40% | 0.460 | 0.143 |
| | 50% | 0.630 | 0.257 |
| CIFAR10 | 10% | 0.113 | 0.082 |
| | 20% | 0.179 | 0.115 |
| | 30% | 0.299 | 0.182 |
| | 40% | 0.440 | 0.238 |
| | 50% | 0.544 | 0.320 |
| | 60% | 0.659 | 0.389 |
| | 70% | 0.793 | 0.545 |
| CH_MNIST | 10% | 0.140 | 0.091 |
| | 20% | 0.249 | 0.158 |
| | 30% | 0.335 | 0.237 |
| | 40% | 0.476 | 0.328 |
| | 50% | 0.638 | 0.408 |
| | 60% | 0.843 | 0.547 |
| ImageNet | 10% | 0.268 | 0.225 |
| | 20% | 0.580 | 0.288 |
| | 30% | 0.805 | 0.379 |