Additional Results for Kiez Benchmark

1 Time and Memory

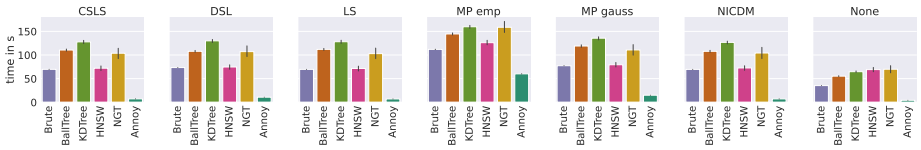

Figure 1: Time in seconds on 15K datasets

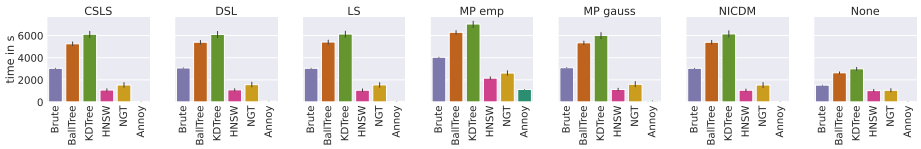

Figure 2: Time in seconds on 100K datasets

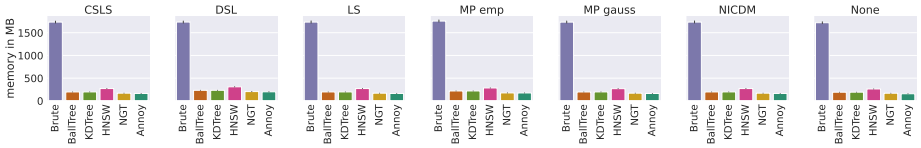

Figure 3: Peak memory consumption on 15K datasets

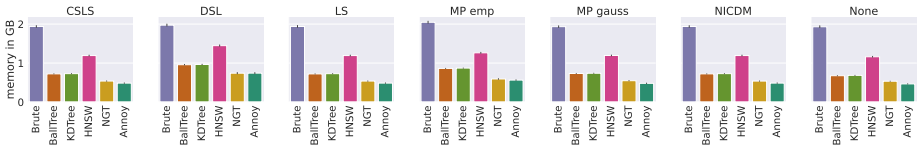

Figure 4: Peak memory consumption on 100K datasets

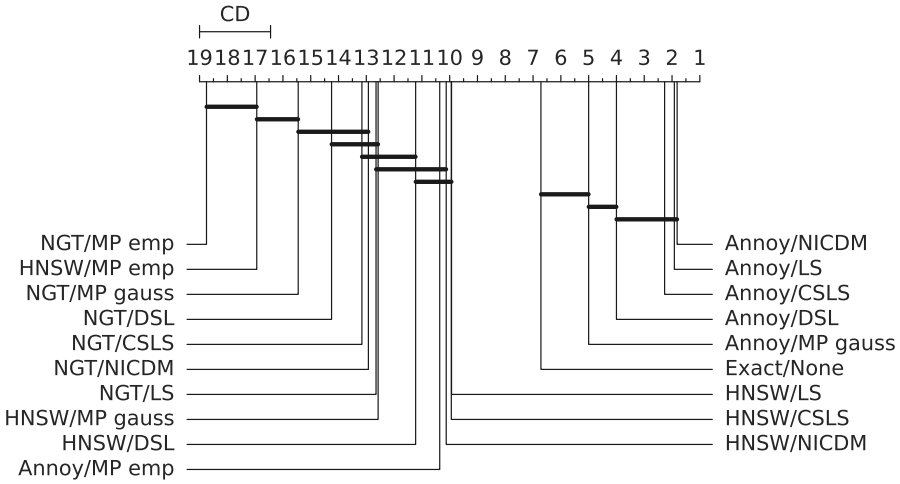

Figure 5: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to execution time on small datasets

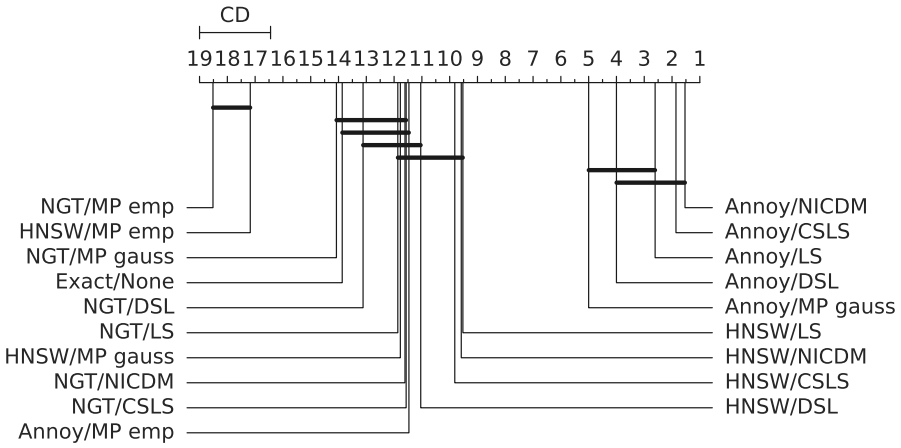

Figure 6: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to execution time on large datasets

2 Results for hits@1

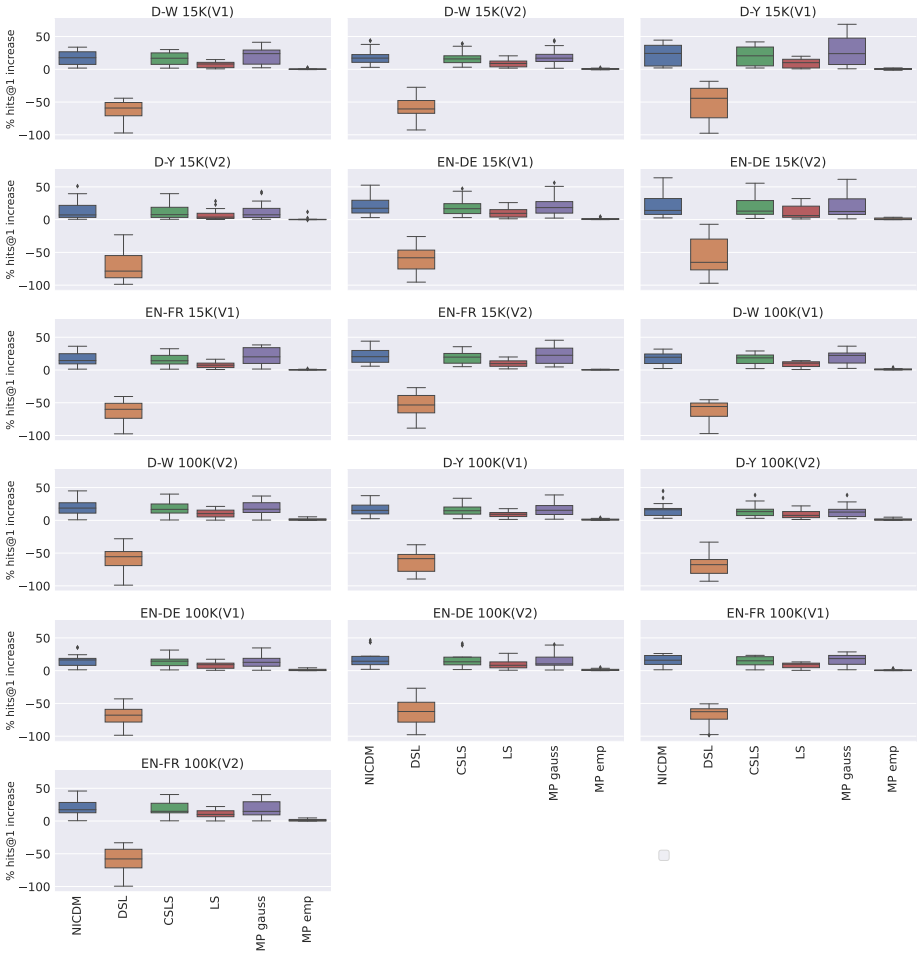

Figure 7: Exact NN improvement over baseline (exact NN without hubness reduction) for hits@1

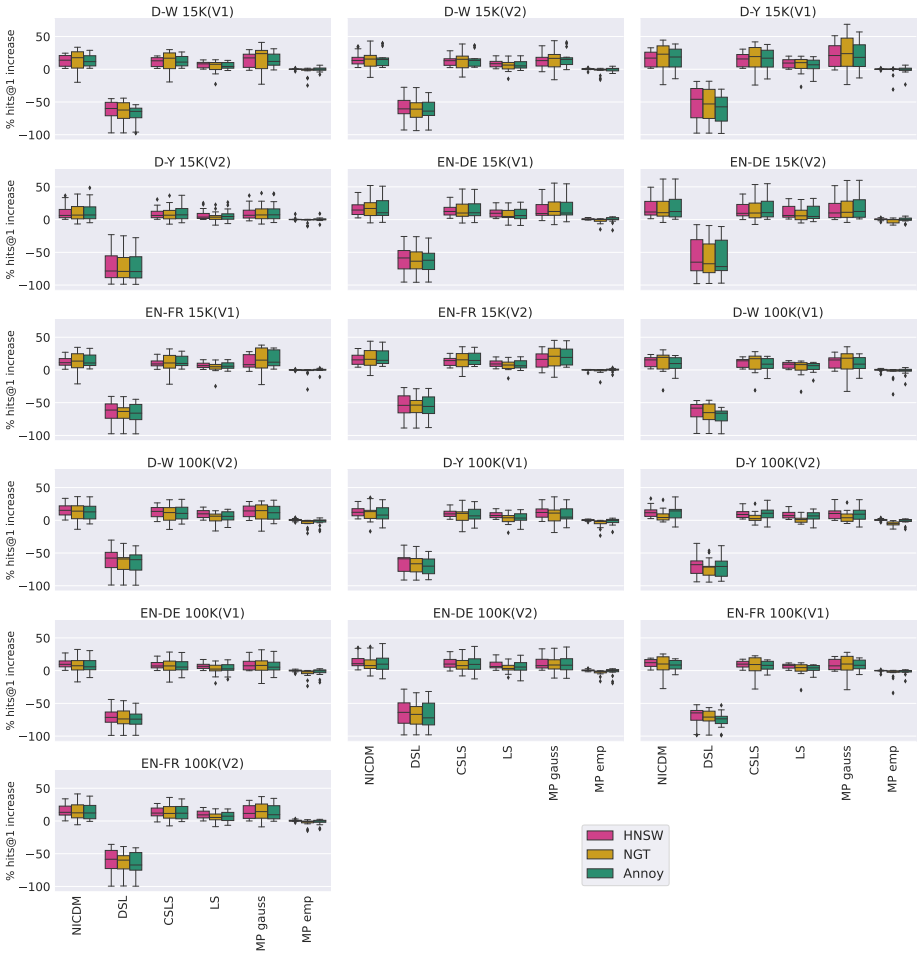

Figure 8: ANN improvement over baseline (exact NN without hubness reduction) for hits@1

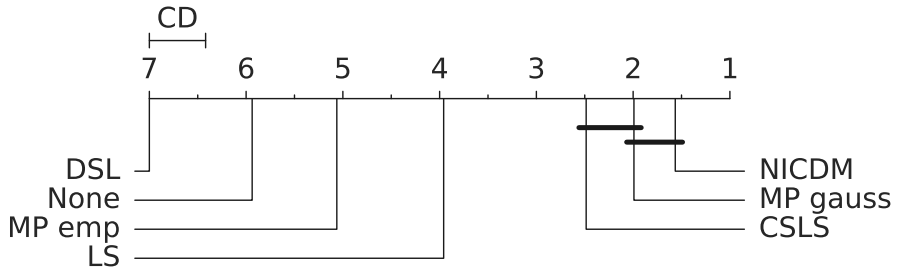

Figure 9: Critical distance diagram showing differences between hubness reduction techniques for exact NN with regards to hits@1

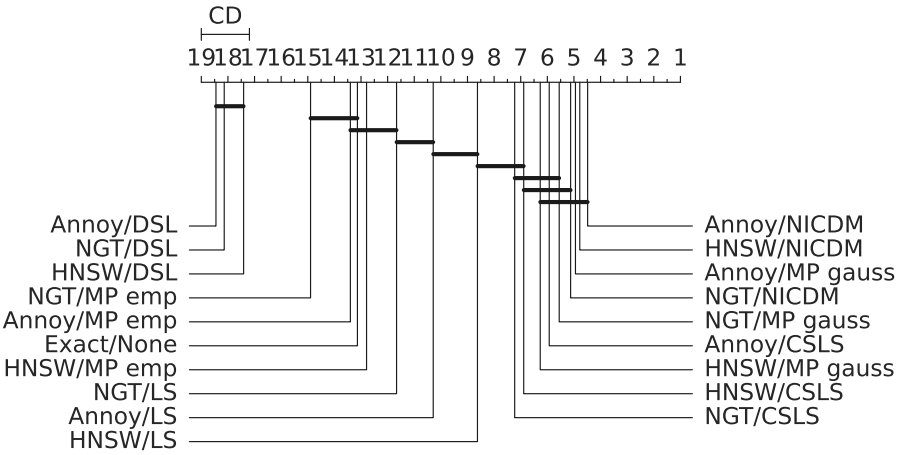

Figure 10: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to hits@1

3 Results for hits@5

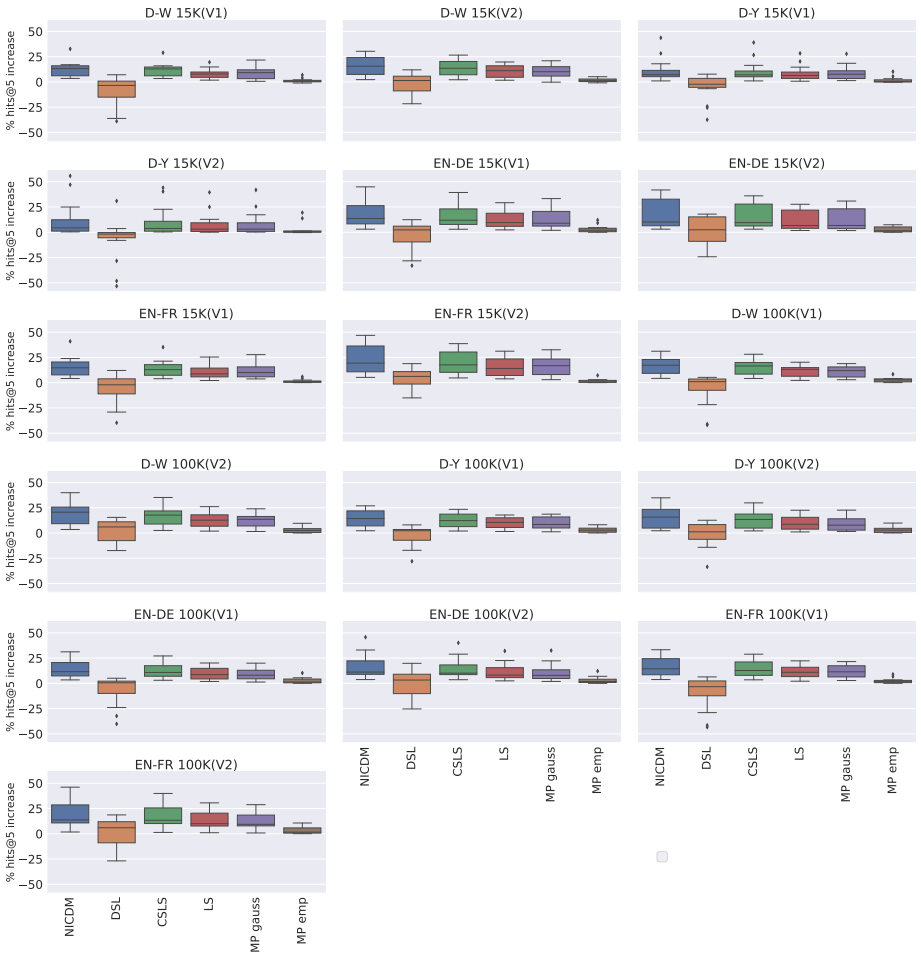

Figure 11: Exact NN improvement over baseline (exact NN without hubness reduction) for hits@5

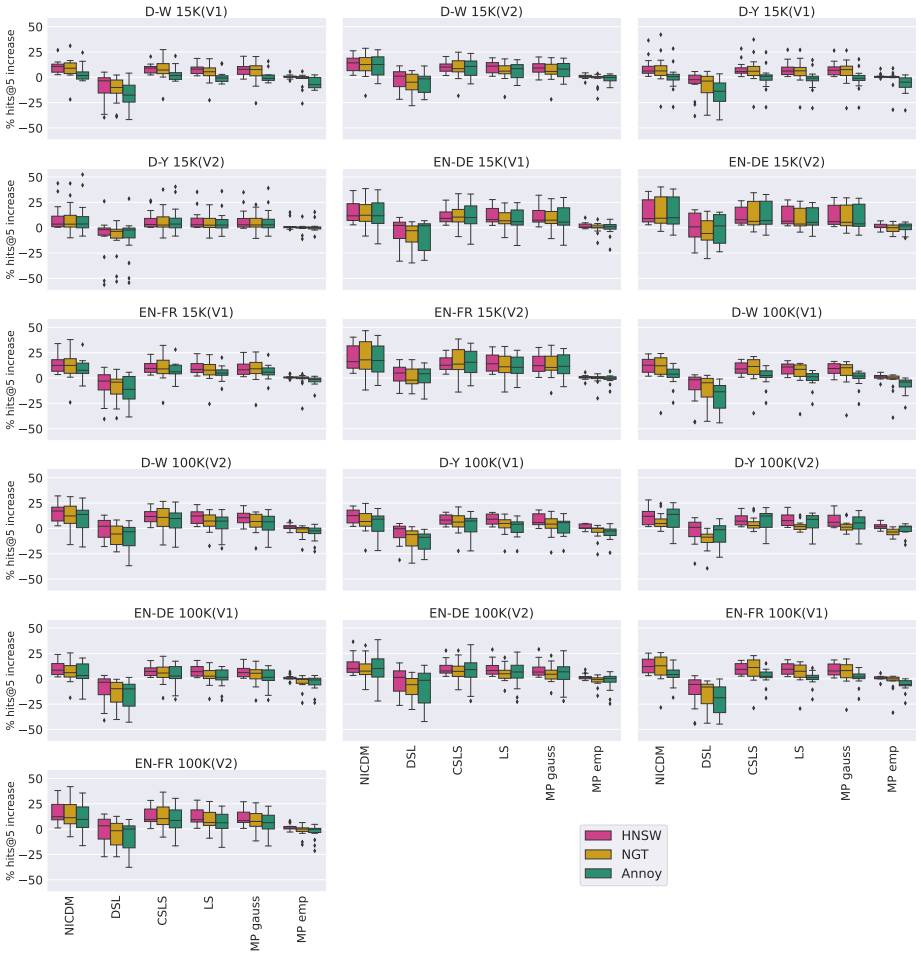

Figure 12: ANN improvement over baseline (exact NN without hubness reduction) for hits@5

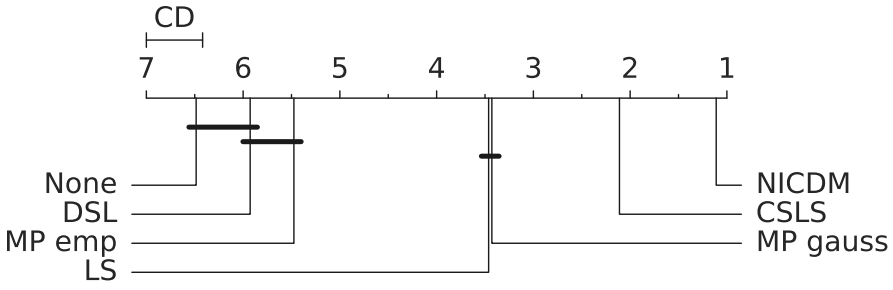

Figure 13: Critical distance diagram showing differences between hubness reduction techniques for exact NN with regards to hits@5

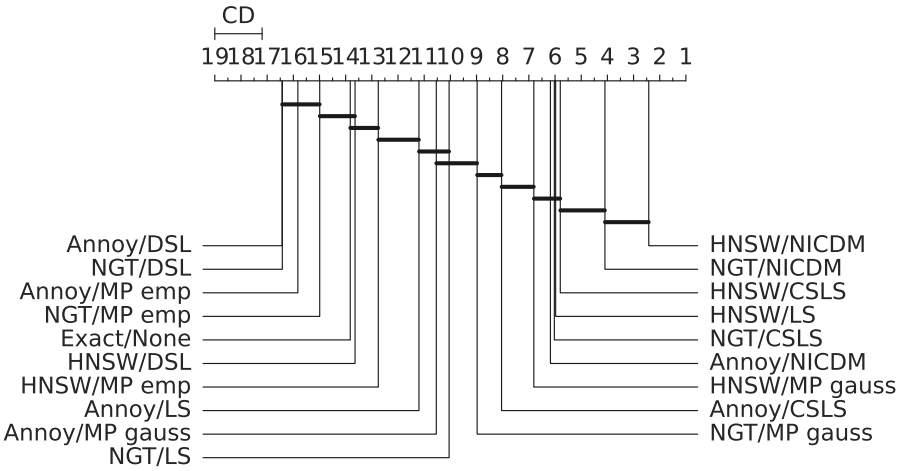

Figure 14: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to hits@5

4 Results for hits@10

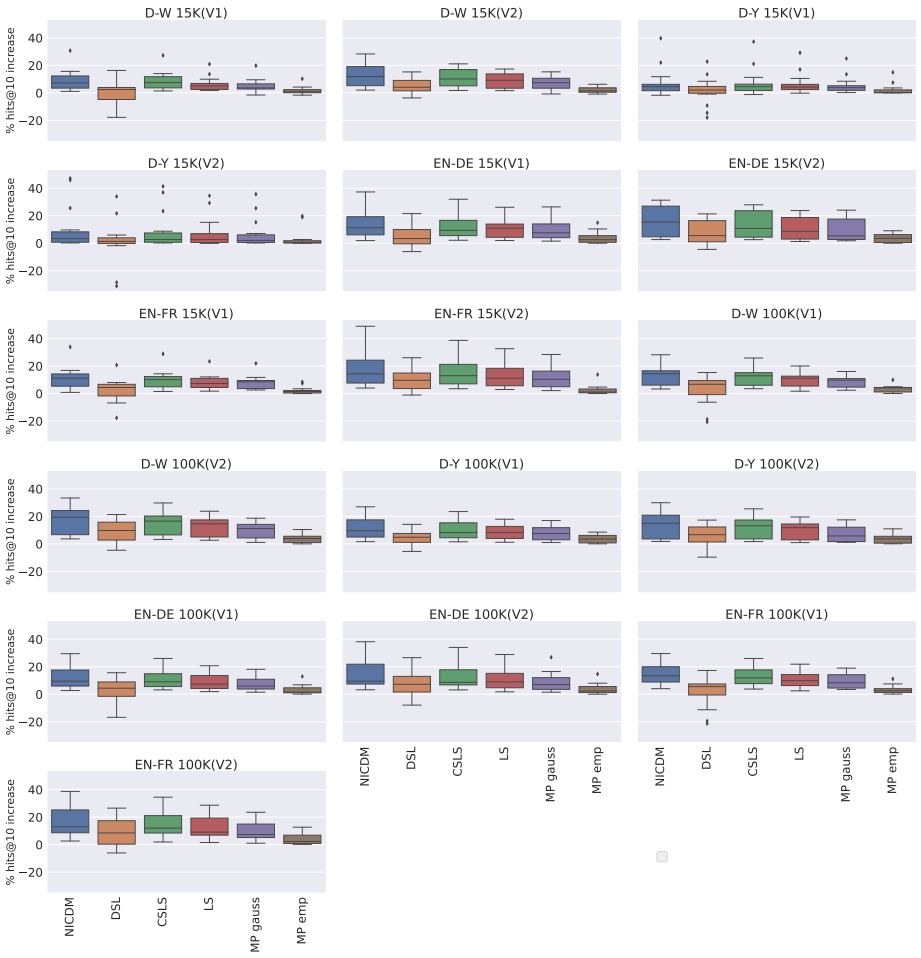

Figure 15: Exact NN improvement over baseline (exact NN without hubness reduction) for hits@10

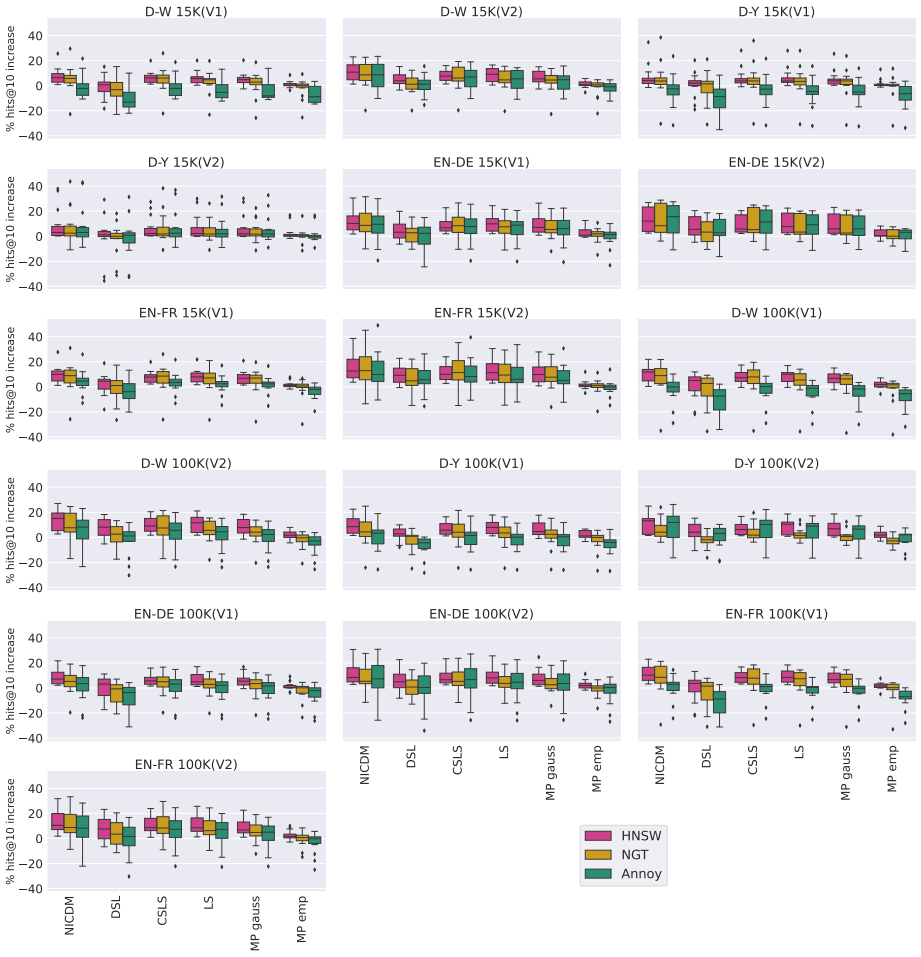

Figure 16: ANN improvement over baseline (exact NN without hubness reduction) for hits@10

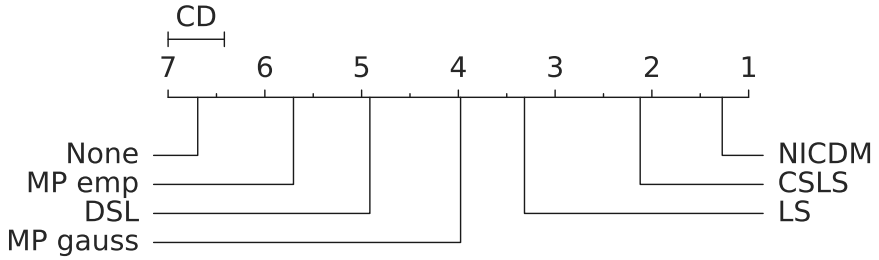

Figure 17: Critical distance diagram showing differences between hubness reduction techniques for exact NN with regards to hits@10

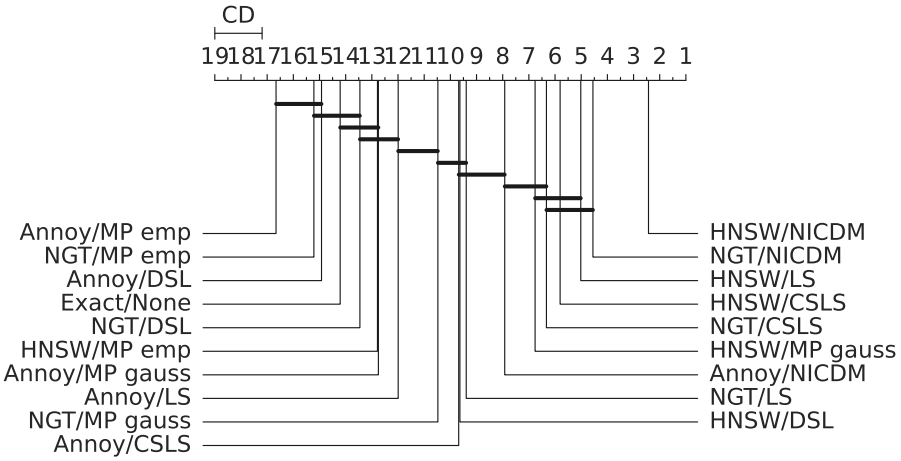

Figure 18: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to hits@10

5 Results for hits@25

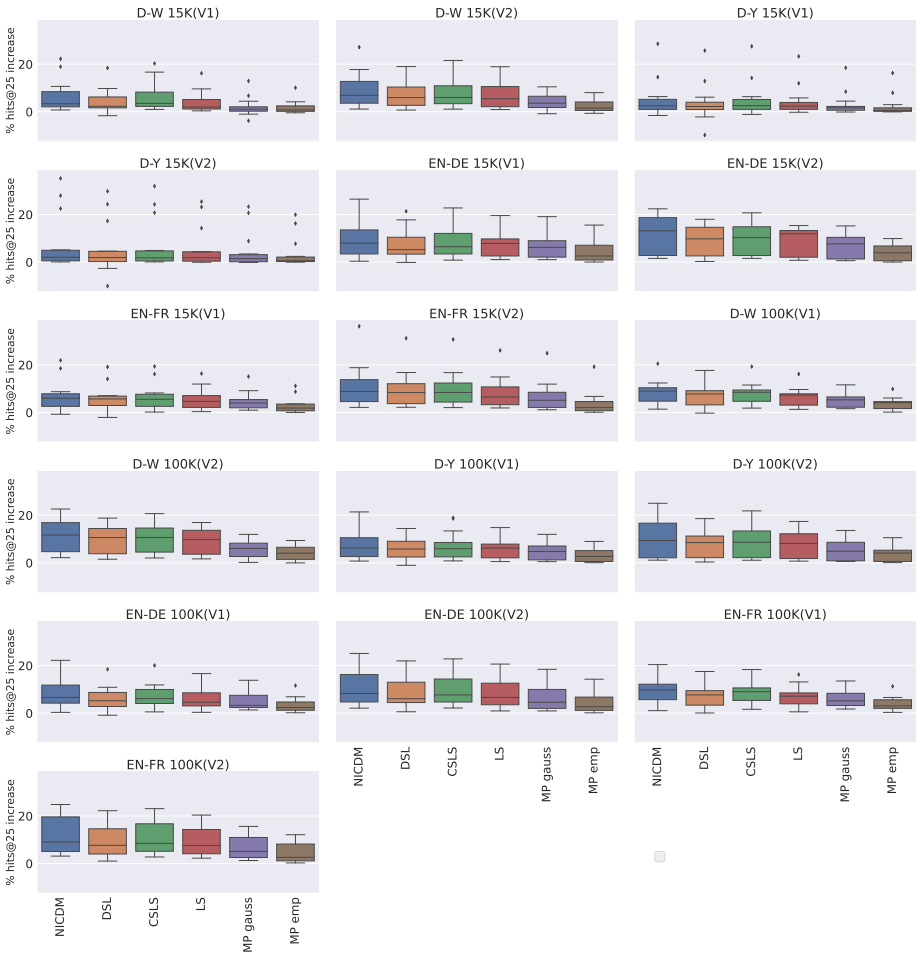

Figure 19: Exact NN improvement over baseline (exact NN without hubness reduction) for hits@25

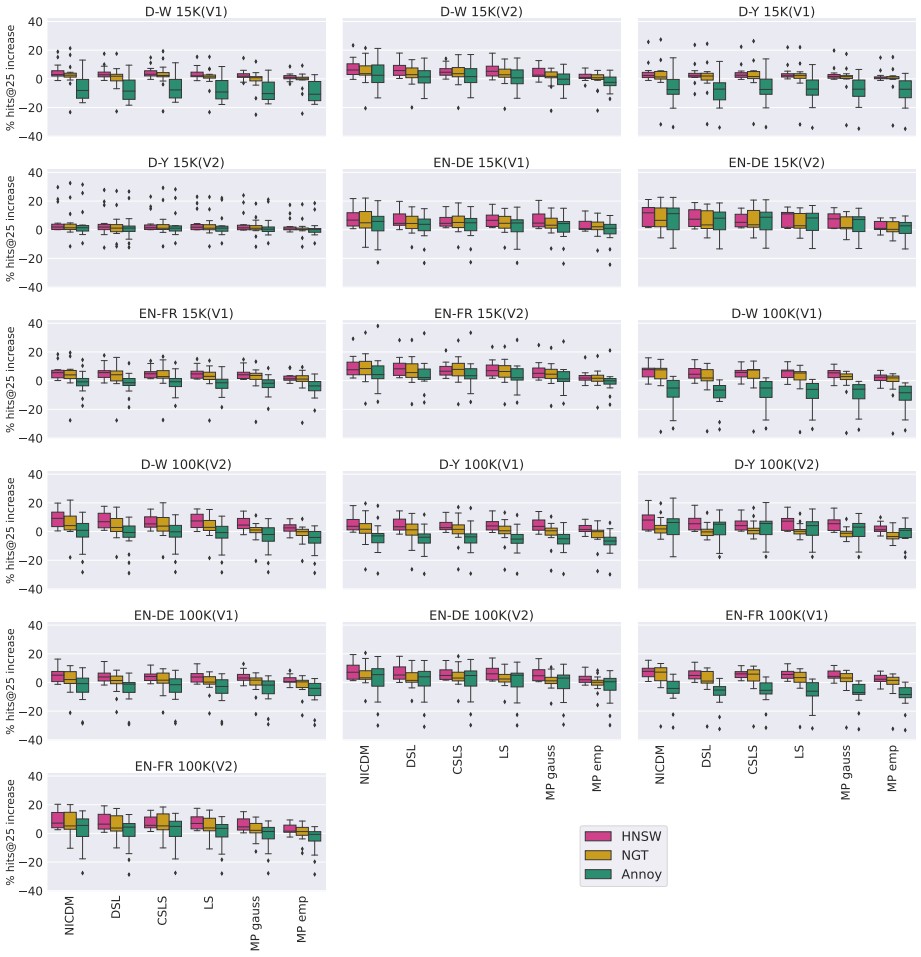

Figure 20: ANN improvement over baseline (exact NN without hubness reduction) for hits@25

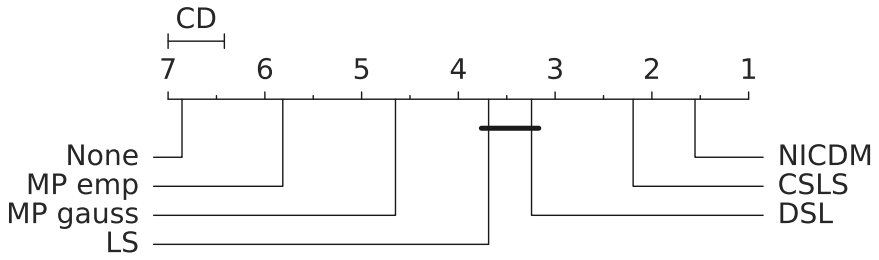

Figure 21: Critical distance diagram showing differences between hubness reduction techniques for exact NN with regards to hits@25

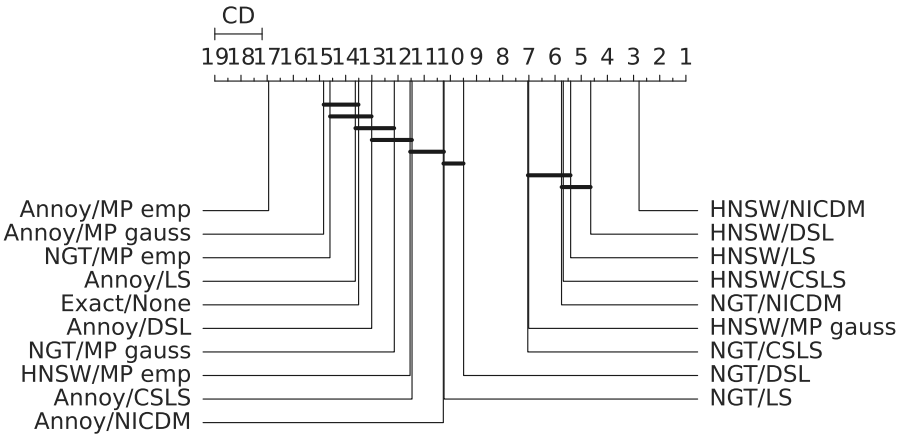

Figure 22: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to hits@25

6 Results for hits@50

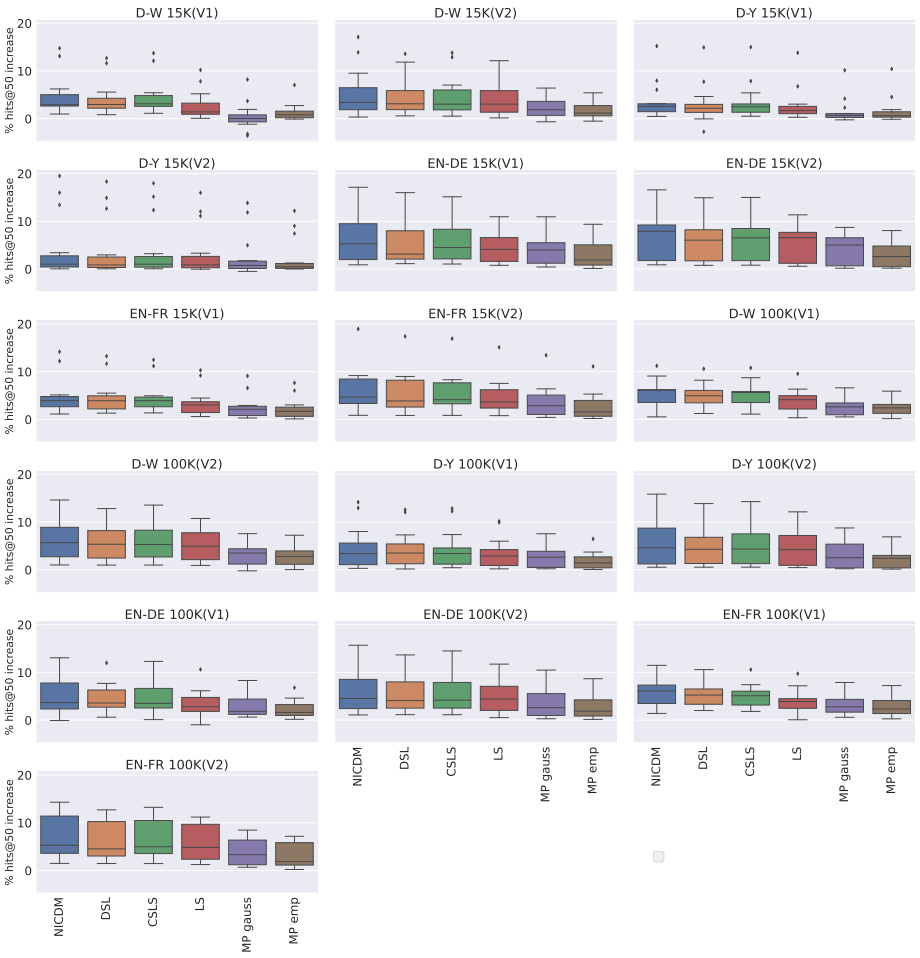

Figure 23: Exact NN improvement over baseline (exact NN without hubness reduction) for hits@50

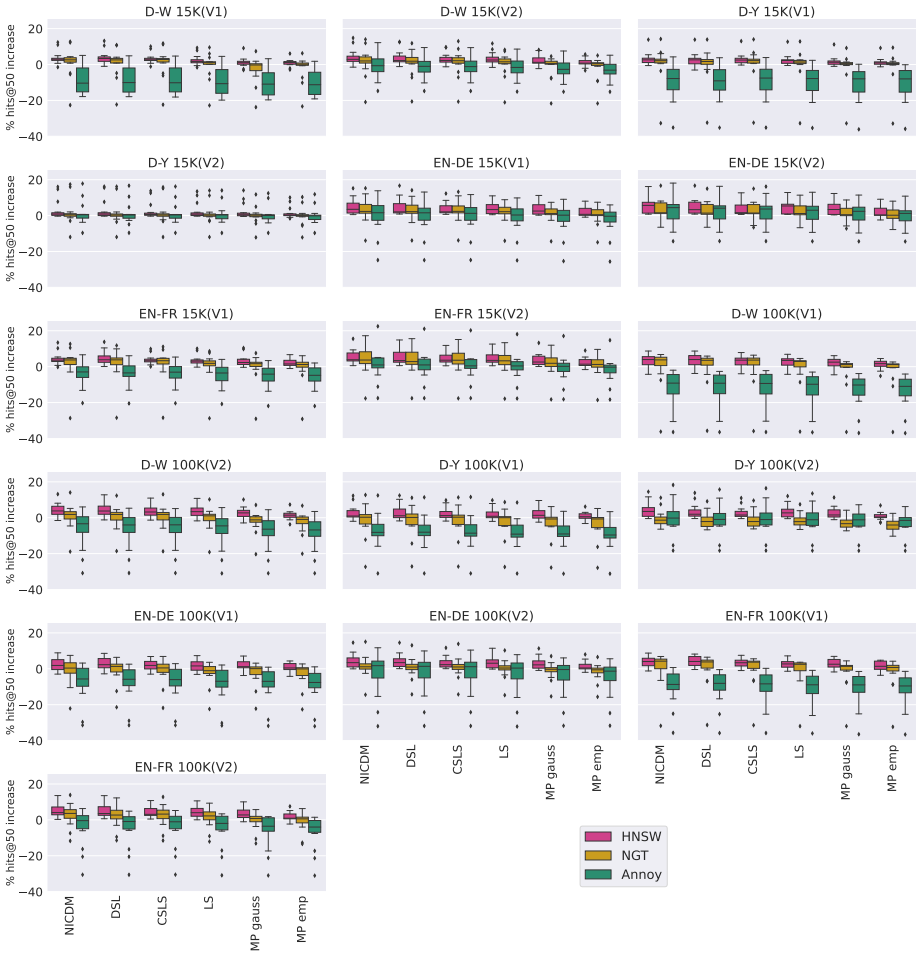

Figure 24: ANN improvement over baseline (exact NN without hubness reduction) for hits@50

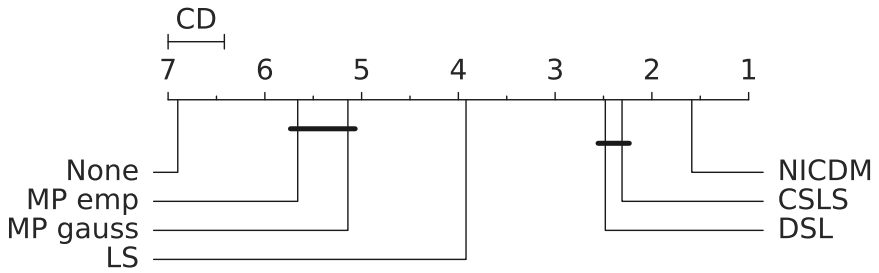

Figure 25: Critical distance diagram showing differences between hubness reduction techniques for exact NN with regards to hits@50

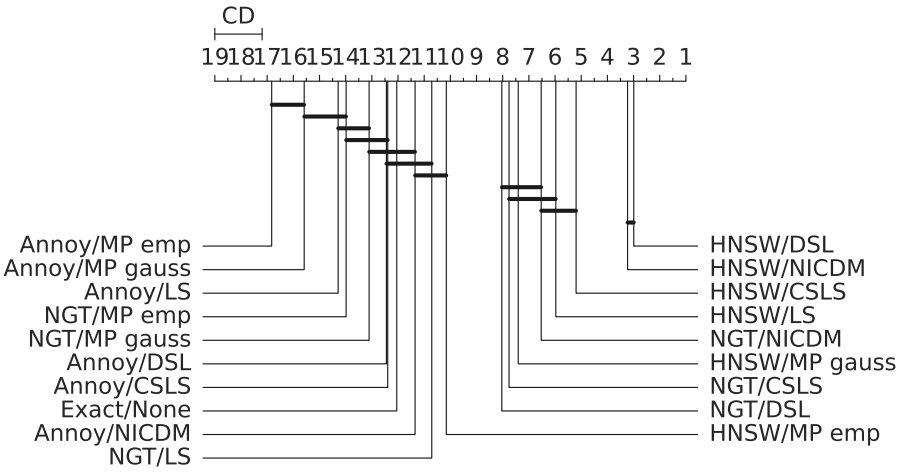

Figure 26: Critical distance diagram showing differences between hubness reduction techniques for ANN and baseline with regards to hits@50