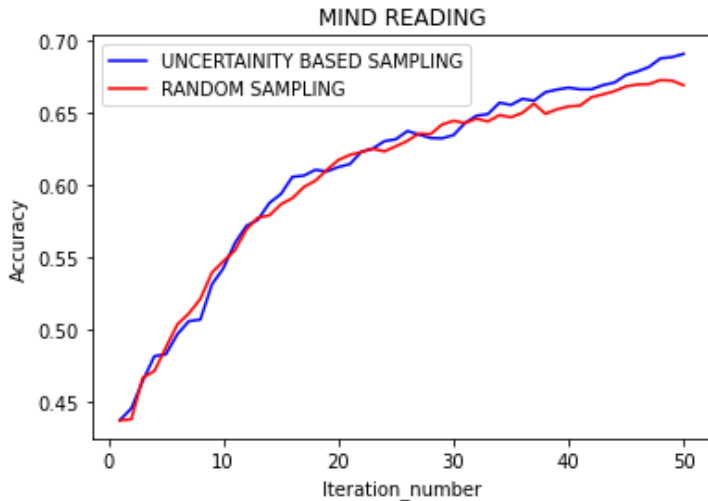


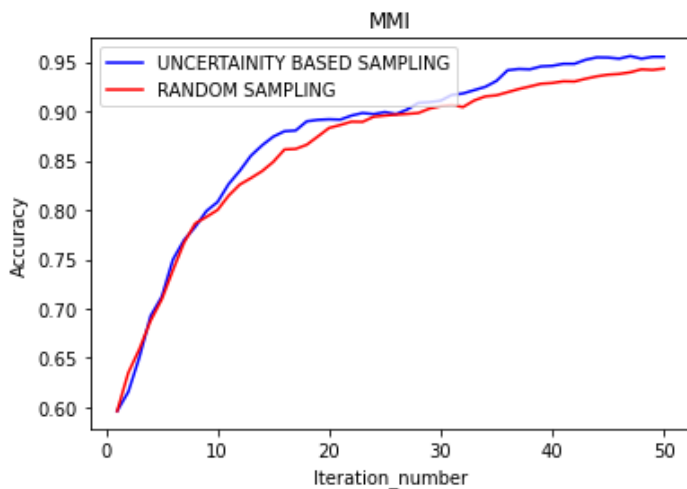
ACTIVE LEARNING ON MIND READING AND MMI DATASET

MIND READING :



1. Both the algorithms have an increasing accuracy with the number of iterations
2. The rate of increase in accuracy was the most in first 20 iterations for both the algorithms
3. In first iteration the accuracy was below 45% but after 50 iterations the accuracy increased to greater than 65%
4. Uncertainty based sampling and random sampling both perform with similar accuracy until the 35 iteration
5. Uncertainty based sampling algorithm performs slightly better than the random sampling algorithm for the mind reading dataset
6. Rate of increase in accuracy is higher for uncertainty based sampling

MMI :



1. Both the algorithms have an increasing accuracy with the number of iterations
2. The rate of increase in accuracy was the most in first 20 iterations for both the algorithms
3. In first iteration the accuracy was near 60% but after 50 iterations the accuracy increased to greater than 90%
4. Uncertainty based sampling and random sampling both perform with similar accuracy until the 10 iterations
5. Uncertainty based sampling algorithm performs slightly better than the random sampling algorithm for the MMI dataset
6. Rate of increase in accuracy is higher for uncertainty based sampling

CONCLUSION:

We can see that uncertainty-based algorithm produces better accuracy than random sampling for active learning. However, both perform similar if the number of iterations are less, so the increased accuracy for uncertainty based algorithm can be attributed to , first the selection of samples with highest entropy and second the number of iterations. Rate of increase in accuracy is more for uncertainty based sampling for both of the datasets.

