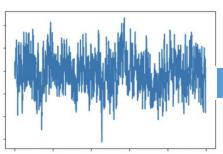
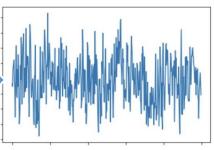
Hungry Stayers











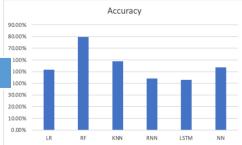




Best for Class 0: KNN Best for Class 1: RF

Best for Class 2: RF









Model	Accuracy
K-Nearest Neighbor	58.87
Logistic Regression	51.38
NN	53.53
Random Forest	79.73
RNN	44.24
LSTM	42.82

Most Model perform poorly for Class 0 because of class imbalance.

Oversampling didn't fix the issue.

Attempt to improve model by considering experimental conditions & train models separately.

- Reduced the size of the dataset by uniform sampling while keeping the pattern of data.
- Held out entire data for 2 animals as test set to represent unseen future data.
- Implemented different methods and compared their performance on the test data.
- Tried to improve the model by addressing class imbalance and considering different conditions.