Deformation of documents

Q-learning

1-Data generation

We assume that the number of features is 15 : f1,f2 …f8

Y=quantization(sum(weighted subset of features with size k=4)

Features =f1=alpha1\*sin(beta1\*t)+c1

F2=alpha2\*sin(beta2\*t)+c1

…

F15=alpha15\*sin(beta15\*t)+c3

This last for certain point of time

Every period T you change the subset to a different sub-set subset and you change also k

DATA=[F1(t) F2(t) ..F15(t)] [Y(t)]

2- Question

Assuming that for chunk t, we were able to know the labels of the chunk so we can use it for training based on Q-learning

State 70 is the previous action

Action subset of features 70

Reward Accuracy

|  |  |  |  |
| --- | --- | --- | --- |
|  | S1 | S2 | ..S70 |
| A1 |  |  |  |
| A2 |  |  |  |
| .. |  |  |  |
| A70 |  |  |  |