w3

Graded

Group

Tagore Kosireddy
Michael Ngala
Feven Tefera
...and 1 more
View or edit group

Total Points

40 / 40 pts

Question 1

Q1 **15** / 15 pts

✔ **– 0 pts** Correct

Question 2

Q2 **8** / 8 pts

2.1 **Q2(a)** **4** / 4 pts

✔ **– 0 pts** Correct

2.2 **Q2(b)** **4** / 4 pts

✔ **– 0 pts** Correct

Question 3

Q3 **9** / 9 pts

3.1 **majority** **3** / 3 pts

✔ **– 0 pts** Correct

3.2 **Ave prob.** **3** / 3 pts

✔ **– 0 pts** Correct

3.3 **Ave prob. prediction** **3** / 3 pts

✔ **– 0 pts** Correct

Question 4

Q4 **8** / 8 pts

4.1 **PC1** **4** / 4 pts

✔ **– 0 pts** Correct

4.2 **PC2** **4** / 4 pts

✔ **– 0 pts** Correct

Group Name	Charlie
Group Member 1	Feven Tefera
Group Member 2	Mihret Kemal
Group Member 3	Michael Ngala
Group Member 4	Tagore Kosireddy

Q1

For each figure, select the parameters of the SVM and SVM kernel that was used to create the decision boundary.
Note, for some figures, there may be more than one that are possible.

I. linear kernel, C=1
II. linear kernel, C=1000
III. polynomial kernel d=2, C=1
IV. polynomial kernel d=2, C=1000
V. rbf kernel, C=1
VI. rbf kernel, C=1000

A. VI
B. III
C. I, II
D. IV
E. V

Q2

(a) Number of random forests we will train
$3 * \delta$

(b) Number of decision trees we will train
$\delta * (\alpha + \beta + \gamma)$

Q3

Majority Vote: Blue

Blue has more number of votes: 6 votes (0.55, 0.6, 0.6, 0.65, 0.7, 0.75)

Ave. Prob.: 0.45

(0.1 + 0.15 + 0.2 + 0.2 + 0.55 + 0.6 + 0.6 + 0.65 + 0.7 + 0.75)/10

Ave. Prob. Prediction: Green

Q4

PC1: D

PC2: F