

COMP90049 Semester 2 2022

Assignment 1 Feedback feedback for Yunhui Rao (1316834)

| Criterion | Available marks | Your mark |
|-----------------------|-----------------|---|
| Question 1 | | |
| Mark | 0.5 | 0.5 |
| Feedback | | |
| Question 2 | | |
| Mark | 1.5 | 1 |
| Feedback | | You have to make sure that the two passed arguments have the same length (Three distance function); Not handling of zero denominator for cosine |
| Question 3 | | |
| Mark | 2 | 2 |
| Feedback | | |
| Question 4 | | |
| Mark | 1 | 1 |
| Feedback | | |
| Question 5 | | |
| Mark | 0.5 | 0.5 |
| Feedback | | |
| Question 6.1 | | |
| Mark | 0.75 | 0.75 |
| Feedback | | |
| Question 6.2.a | | |
| Mark | 1 | 1 |

| Criterion | Available marks | Your mark |
|-----------------------|-----------------|--|
| Feedback | | |
| Question 6.2.b | | |
| Mark | 0.5 | 0.5 |
| Feedback | | |
| Question 6.2.c | | |
| Mark | 0.25 | 0.25 |
| Feedback | | |
| Question 6.3 | | |
| Mark | 0.75 | 0.5 |
| Feedback | | <p>Euclidean distance is the sum of squared differences, it means it is not normalized and will be dominated by large-magnitude features. That's why it is not a "appropriate" method here; Chebyshev is the max value of differences meaning it is not normalized and only taking into account large-magnitude; Cosine distance is one minus the dot product of two</p> |

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|---------------------|-----------------|---|
| | | normalized vectors, hence not susceptible in differences in magnitude. Cosine distance is an appropriate method for this dataset. features and ignoring the rest. That's why it is not a "appropriate" method here; |
| Question 6.4 | | |
| Mark | 0.75 | 0.5 |
| Feedback | | incomplete reasoning. Weighted KNN performing better because in majority voting we resort to "closest neighbor" in case of ties |
| Question 6.5 | | |
| Mark | 0.5 | 0 |
| Feedback | | The correct answer is "no" because of |

| Criterion | Available marks | Your mark |
|---|-----------------|---|
| | | the imbalanced data distribution it will be dominated by the performance of the majority class. |
| Penalties | | |
| Late penalty (if applicable) | | |
| Authorship Missing | | |
| Overall mark for Assignment 1 Feedback | 10 | 8.5 |