

Week 2 Pass Task – SIT720 – Damon Vizl – s223545885

Summary

- We covered some math concepts related to machine learning including:
 - Statistics and Probability. We discussed how to calculate basic probability, joint probability, conditional probability and Bayes rule.
 - Normal distribution, uniform distribution and Bernoulli distribution.
 - We also touched on the central limit theorem that populations tend to a normal distribution as the sample size grows.
- We discussed data wrangling methods as well including an understanding of features, matrices, vectors, signals and data.
- We discussed encoding (i.e. transforming categorical data into numbers to allow the ML model to process it)
- We discussed scaling and normalization to ensure that the size of a certain feature doesn't oversaturate the model and skew the model.

Reading list and Knowledge Reflection

In order to enhance my understanding of this weeks subjects I read more information about the data wrangling methods using python extensions numpy, pandas, sklearn and scipy. I went to the sklearn website and perused the API to further understand what the encoding was doing, specifically the One Hot Encoder that I used in the problem set.

I also delved deeper into the scipy stats module to learn about the Shaprio-Wilks test to confirm if a data set is normally distributed.

Quiz Results

DAMON VIZL (username: s223545885)

✕

Attempt 4

Written: 20 March, 2023 8:13 AM - 20 March, 2023 8:15 AM

Submission View

Your quiz has been submitted successfully, the answer(s) for the following question(s) are incorrect.

Attempt Score: 10 / 10 - 100 %

Overall Grade (highest attempt): 10 / 10 - 100 %