

Artificial Intelligence Spring 2022

Term Project #3 Due Date: 06/10/2022 11:59PM

1. Project Objective and Description

Use a Naïve Bayes (NB) classifier to classify data.

There are 2 different datasets, each with a training and a testing set. The class is shown in the last column on each training file.

The first row on each training file presents the feature type. A “1” indicates a numerical feature; a “0” indicates a categorical feature.

The “?” indicates a missing value.

Train your NB on the training datasets. Then run your trained NB on the test data and fill in the predicted “class” to the last column of the testing.csv.

Note: You need to handle missing values and zero probabilities.

2. Language

C++ / Python

3. What to submit

- (1) Your source code (60%)
- (2) “test_xx.csv” with the answer, and rename it as “student-ID_xx.csv”, e.g., 309515003_01.csv (don’t change the csv format in any way) (40%)
- (3) Please zip all your files into student-ID.zip

4. Demo

Make sure your code submitted to e3 is correct. We will randomly sample some students to demonstrate their NB’s performance, using the code submitted on E3.