Indian Institute of Technology Madras

ID5055 Foundations of Machine learning

Tutorial I

Due date: 8.00 pm, August 24, 2023

Instruction

1. Assignment shall be submitted on the due date. Late submissions will not be entertained. If you cannot submit the assignment due to some reasons, please contact the instructor by email.

2. All the assignments must be the student's own work. The students are encouraged to collaborate or consult friends. In the case of collaborative work, please write every student's name on the submitted solution.

3. If you find the solution in the book or article or on the website, please indicate the reference in the solutions.

Problems

1. Let us consider the student performance dataset (click here to download the dataset. Use the feature 'G1' to answer the following questions.

   (a) Plot the histogram and guess the distribution the given feature follows

   (b) Estimate the parameters of the distribution by maximizing the log-likelihood