MALMÖ UNIVERSITET

MA660E, Lab Report

Your name(s)

Part One: Probability computation

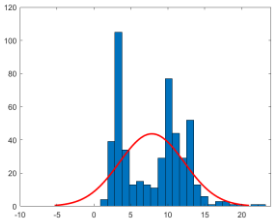
c) ii) P((X, Y) ∈ D) = ?

We divide the region D into two smaller regions D1 and D2.
D1: $0 < x < 0.5$, $0.5 + x < y < 0.5 - x$; D2: $0.5 < x < 0.5$, $x - 0.5 < y < 1.5 - x$.
Then we integrate the pdf on each region D1 and D2, obtain the desired probability as sum of these integrals: P((X, Y) ∈ D) = …

Part Two: Statistics and inference

xx) Variable Hour: $\bar{x}$, s and Histogram, normal distributed ?

The mean $\bar{x}$ is 7.84 hours (rounded in two decimals), and standard deviation s is 4.39 hours (rounded also two decimals). Below is the associated histogram.



as we can see from the diagram that there are two highly represented groups with centre around 3 hours and 10 hours. Clearly Hour is far away from normal distribution.