
ECE-503 Prelab 2

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1 What is the size of N_p and N_n for the given data structure?

$N_p = 40$ and $N_n = 80$.

2 What are the sizes of matrix \hat{X} , \hat{X}^T , \hat{w} , and y ?

$\hat{X} = 4 \times 120$, $\hat{X}^T = 120 \times 4$, $\hat{w} = 4 \times 1$, $y = 120 \times 1$

3 Express the equation to calculate \hat{w} derived from E2.2a

$(\hat{X}^T \hat{X})^{-1} \hat{X}^T y$