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CS 689

HW 1: Data Visualization

Task 1: Visualize MNIST Data using PCA

Read in provided MNIST data csv file using pandas. Projected data onto 2D and fit onto dataframe using sklearn PCA. Plotted data points onto figure as text representing group (0-9) data point belongs to, using matplotlib.

Task 2: Visualize Housing Data Columns K, M, and N using Violin Plot

Read in provided housing data csv file using pandas, only read columns 10, 12, 13, corresponding to K, M, N. Plotted data onto violin plot using matplotlib, labeled figure for added readability.

Task 3: Visualize Housing Data Column A as a Histogram

Read in provided housing data csv file using pandas, only read column 0, corresponding to A. Created histogram with matplotlib, labeled figure for added readability.

Finally, called matplotlib to display all three figures at once.