MM2090

Final Assignment

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1 Question 1

1.1 Task

Generate 10 random numbers y_i between -1 and +1. Use these as points (x_i, y_i) where $x_i = i$ and show them as a scatter plot. Fit a higher order polynomial over these points to generate a pattern of how a random noise would look like. Sample the polynomial to generate about 100 points in the interval x_1 to x_{10}. Superpose a plot of this data along with original points (xi, yi). Identify the peaks (location and height) programmatically. Print them out and confirm those with the plot.

1.2 Solution

Link to the GitHub repository for this question: GitHub