

Non-Parametric Statistics Exercise 4

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Exercise 2.3

Implement the histogram rule $h_{D,s}$ in an algorithm that only uses $O(n)$ spaces, where n is the number of samples. Visualize the effect of different widths on the data sets of Exercise 2.2.

Solution:

For each distribution in Exercise 2.2, we have generated 10,000 samples.

Specifically, the 3 normal distributions we chose in Exercise 2.2 *i*) have following properties: