

Przykł. problem

$x_1, x_2, x_3, \dots, x_N$

f.g.p.

$\sim f(x) \leftarrow$ nieznana

$$f(x) = \sum_{i=0}^{\infty} a_i \varphi_i(x)$$

$$a_i = \int f(x) \cdot \varphi_i(x) dx = E \varphi_i(x)$$

$$\hat{a}_i = \frac{1}{N} \sum_{k=1}^N \varphi_i(x_k)$$

$$\hat{f}(x) = \sum_{i=1}^S \hat{a}_i \varphi_i(x)$$