$L_n = \{(X_1, Y_1), ..., X_n, Y_n)\}$

$\mathbb{1}^p$

$X_i = (X_i^1, ..., X_i^p)$

$X_i \in^p$

$Y_i \in$

$\exists$

$\forall$

$Y_i =$

$S(X_i)+$

ξ

$\mathbf{S}$

(x)

B

$1, ..., B$

$(x) =_B (x) = \frac{1}{B} \sum_{i=1}^{B} i$

$E[((x) - S(x))^2] = (E[(x)] - S(x))^2 + Var((x))$

$1, ..., B$

$E[(x)] =$

$E[_1(x)]$

$Var((x)) =$

$\frac{1}{B} Var(_1(x)$

$_k(x)$

$_k(x)$

L_n

2