

机器学习引论作业二

何长鸿 2016141482154

1 Question1

Q:Who is Vladimir N. Vapnik?

A:He is one of the main developers of the Vapnik–Chervonenkis theory of statistical learning,[1] and the co-inventor of the support-vector machine method, and support-vector clustering algorithm.

2 Question2

Q:How to compute the distance between a given data point to the boundary?

A:For the i -th point x_i in data, we calculate the distance from point to the hyperplane with the expression

$$r = \frac{W^T x_i + b}{\|W\|}$$

where W is weights of the hyperplane, b is the constant term.