Theoretical homework 2

2-AIN-150, Winter 2018

Deadline: 10.12.2018, 23:59, via moodle.uniba.sk/fmfi

Before you start solving the homework, please read the general instruction at the end of the document. Submitted solutions should be your own. Do not copy and do not tried to find solution in literature or over the internet.

VC dimension

a) Given two input attributes x_1, x_2 and set of hyphotheses H, which consists of all cicles in plane (all points inside of circle are classified as positive and outside as negative). How many parameters does this hyphothesis have? What is VC dimension of this hyphothesis set?

b) Given two input attributes x_1, x_2 and set of hyphotheses H, which consists of all axis aligned squares in plane (all points inside of circle are classified as positive and outside as negative). How many parameters does this hyphothesis have? What is VC dimension of this hyphothesis set?

General instructions

Submit a solution in PDF format via moodle.