
Neural Networks

Assignment 4

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1 SUMMARY

2 CONSIDER THE SPACE OF INSTANCES X CORRESPONDING TO ALL POINTS IN THE X, Y PLANE. GIVE THE VC DIMENSION OF THE FOLLOWING HYPOTHESIS SPACES:

2.1 H_R = THE SET OF ALL RECTANGLES IN THE X, Y PLANE. I.E. $H_R = \{((a < x < b) \wedge (c < y < d)) | a, b, c, d \in \mathbb{R}\}$

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2.2 H_C = THE SET OF ALL CIRCLES IN THE X, Y PLANE. POINTS INSIDE THE CIRCLE ARE CLASSIFIED AS POSITIVE EXAMPLES.

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2.3 H_T = THE SET OF ALL TRIANGLE IN THE X, Y PLANE. POINTS INSIDE THE TRIANGLE ARE CLASSIFIED AS POSITIVE EXAMPLES.

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