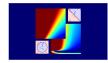
Machine Learning Foundations

(機器學習基石)



Lecture $6+\epsilon$: Supplementary—From Break Point to VC Dimension

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Break Point and VC Dimension

| N | 1 | 2 | 3 | 4 | 5 | |
|----------------------|---|---|-----------------|----|----|----|
| $m_{\mathcal{H}}(N)$ | 2 | 4 | 8 | 14 | 22 | |
| | | | d _{vc} | BP | BP | BP |

- BP (i.e. $N > d_{VC}$): # dichotomies of **any** N points < 2^N
- $N \le d_{VC}$: # dichotomies of **some** N points = 2^N [shatter!!]