

CSE 446: Machine Learning Winter 2018

Assignment 2

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0 Policies

0.1 List of Collaborators

My collaborators were Edith Heiter (discussed ?) and Julia Hesss (discussed ?). The development of the answers though was completely independent and individually.

0.2 List of Acknowledgments

None.

0.3 Policies

I have read and understood these policies.

1 Perceptron Exercise

2 Implementation: Perceptron

Table 1: Add caption

dataset	question number			
	2	3	4	5
2	Is linear separable because error rate doesn't change after ≈ 380 epochs	Does not overfit because test-set error doesn't rise	No features	/
3	Is linear separable because error rate doesn't change after ≈ 2000 epochs	Does not overfit because test-set error doesn't rise	No noise	
4				
5				
6				
7				
8				
9				

3 Beat the Perceptron

4 PCA on Digits

5 Bayes Optimal Classifier

6 Bonus: Dimensionality Reduction

7 Bonus: The Bayes Optimal Hypothesis for Regression