

## HW 4 Point Distribution

### Problem 1 (15)

- i. (4)
- ii. (4)
- iii. (4)
- iv. (3)

### Problem 2 (15)

- i. (5)
- ii. (5)
- iii. (5)

### Problem 3 (10)

### Problem 4 (20)

- i. (7)
- ii. (7)
- iii. (6)

### Problem 5 (40)

Program (25)

- (6) Working program with commented code.
- (4) Prints out train, tune, and test error every 50 epochs
- (4) Prints out epoch where tune set was highest & test set accuracy at that epoch
- (4) Prints out weight on each feature plus threshold
- (7) Correct output on testbeds (should learn the functions)

Report (15)

- (5) Plot of accuracies with labeled axes
- (10) Discussion
  - (2) Do you see overfitting?
  - (2) Did tune set do a reasonable job of choosing a stopping point?
  - (2) Comparison to ensemble of decision trees
  - (4) Weights on each feature, and which feature has largest pos/neg weights