

A Better Story: The Margins Explanation

[with Freund, Bartlett & Lee]

- key idea:
 - training error only measures whether classifications are right or wrong
 - should also consider **confidence** of classifications
- recall: H_{final} is weighted majority vote of weak classifiers
- measure confidence by **margin** = strength of the vote
= (weighted fraction voting correctly)
− (weighted fraction voting incorrectly)

