

Boosting as a Game

- Mindy (row player) \leftrightarrow booster
- Max (column player) \leftrightarrow weak learner
- matrix **M**:
 - row \leftrightarrow training example
 - column \leftrightarrow weak classifier
 - $\mathbf{M}(i, j) = \begin{cases} 1 & \text{if } j\text{-th weak classifier correct on } i\text{-th training example} \\ 0 & \text{else} \end{cases}$
 - encodes which weak classifiers correct on which examples
 - huge # of columns — one for every possible weak classifier