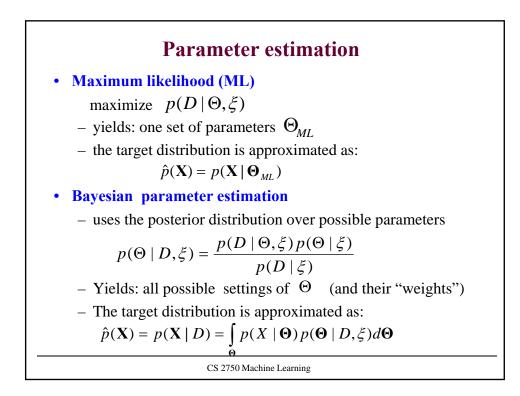
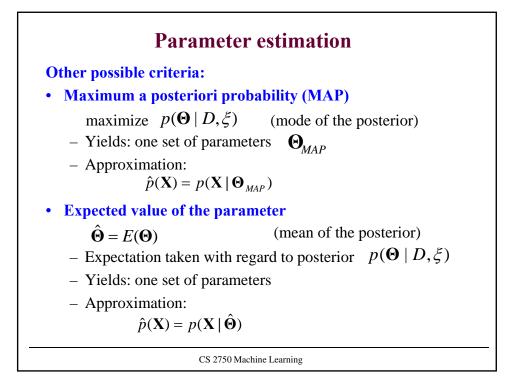
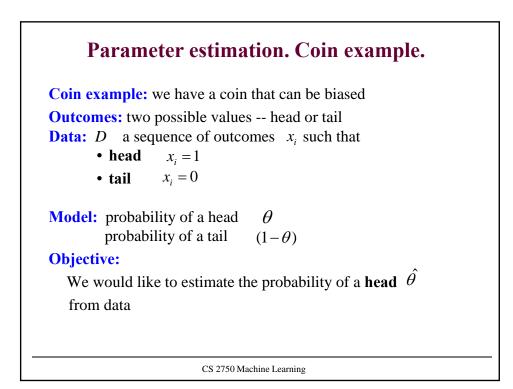
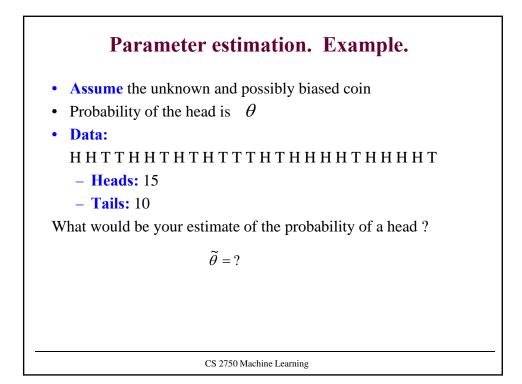


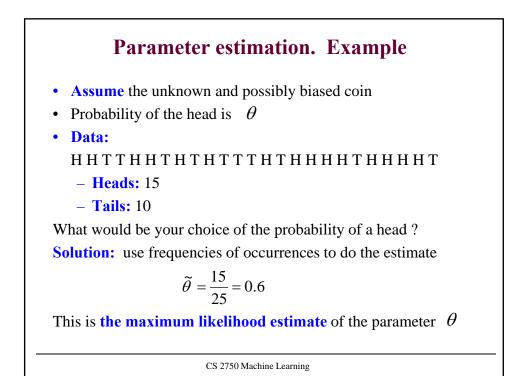
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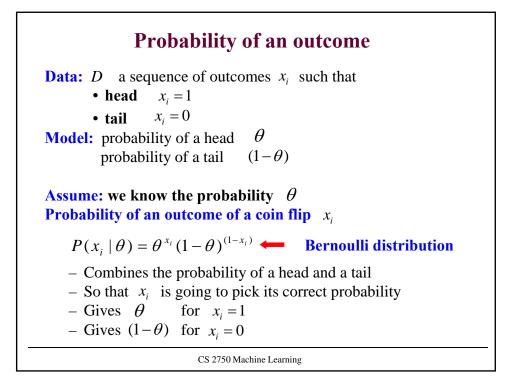


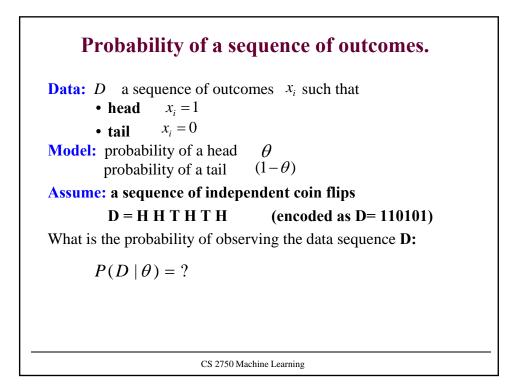


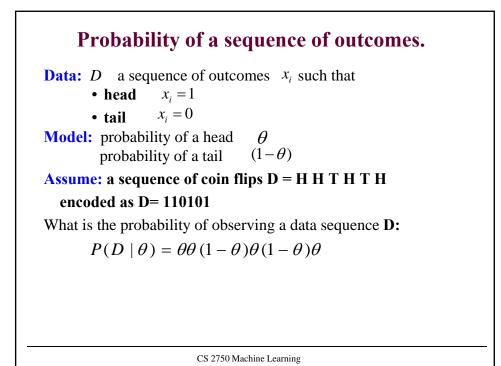


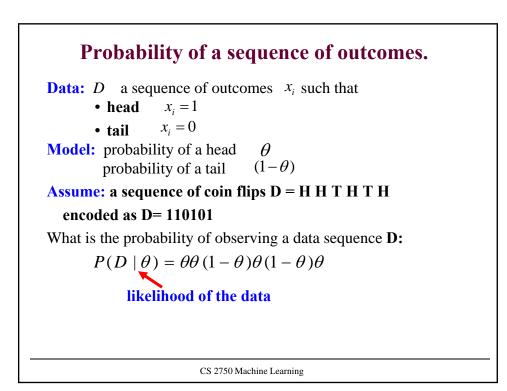


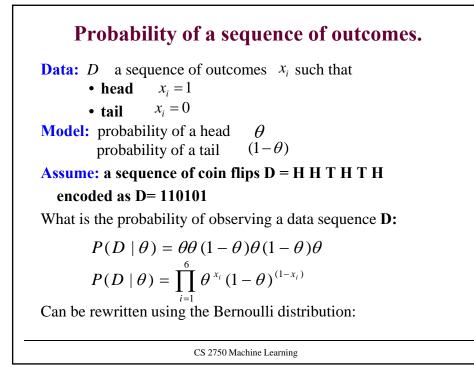












The goodness of fit to the data Learning: we do not know the value of the parameter θ Our learning goal: • Find the parameter θ that fits the data D the best? **One solution to the "best":** Maximize the likelihood $P(D | \theta) = \prod_{i=1}^{n} \theta^{x_i} (1-\theta)^{(1-x_i)}$ **Intuition:** • more likely are the data given the model, the better is the fit Note: Instead of an error function that measures how bad the data fit the model we have a measure that tells us how well the data fit : $Error(D, \theta) = -P(D | \theta)$

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