

Model Selection

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Outline

- Background and motivation
- Over view of techniques
 - AIC, BIC, MDL, Cross Validation, Boot strap
- Comparison AIC and BIC
 - Eye view on BIC
 - Model selection with AIC,BIC
- Effective parameter
 - In Ridge regression, Splines, kernels
- Minimum Description Length
 - Entropy – energy content.
 - Examples
 - Relation to BIC

Background and Motivation

- Model Selection
 - Parameters to change
- Overview of error measures and when is it used
 - AIC -> Low data count, strives for less complexity
 - BIC -> High data count, less complexity
 - MDL -> Used in Information theory
 - MDL - Minimum Description Length
 - Similar to BIC, different motivation
 - Cross validation
 - Boot strap methods