

Introduction to Machine Learning

NPFL 054

<http://ufal.mff.cuni.cz/course/npfl054>

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Programming questions

- **Gradient Descent Algorithm:** a simple illustration
- **Linear regression**
 - Auto data set, target attribute: mpg
- Student data set
- **Most Frequent Classifier**
 - $Y = \{1, \dots, N\}$
 - $D = \{\langle \mathbf{x}_i, y_i \rangle, \mathbf{x}_i \in \mathbf{X}, y_i \in Y, i = 1, \dots, n\}$
 - most frequent class in D : $k^* = \operatorname{argmax}_{k=1, \dots, N} \sum_{i=1}^n \delta(y_i = k)$
 - $f(\mathbf{x}) = k^*$
- **Logistic regression** `glm()`
- **Accuracy, Precision, Recall, F-measure**