Machine Learning in R: a Hands-on Experience

Gabriele Bonomi, Fabio Colombo, Luca Mammi May - June **2018**

0.0 Download Slideshow
0.0 Download Stideshow
0.1 Teaser Trailer
Session 1
The Basics
1.0 Download Slideshow
1.1 Introduction to the Tidyverse
1.2 Machine Learning Libraries in R
1.3 K Nearest Neighbors
1.4 Support Vector Machines
1.5 Tree-based Models
1.6 Titanic Dataset

Session 2

Traning Strategies et al.

- 2.0 Download Slideshow
- 2.1 Bias-Variance Tradeoff
- 2.2 Model Performance
- 2.3 Model Selection
- 2.4 Hyperparameter Optimization
- 2.5 Credit Card Fraud Dataset

Session 3

Deep Learning

- 3.0 Download Slideshow
- 3.1 Introduction to Neural Networks
- 3.2 Convolutional Neural Networks
- 3.3 Recurrent Neural Networks
- 3.4 Regularization Techniques
- 3.5 Convnets for Text Recognition



Figure 1: