

Machine Learning in R: *a Hands-on Experience*

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0.1 Teaser Trailer

Session 1

The Basics

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.

2.1 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

3.1 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: