# Experiment [Name of dataset]

# 1 Dataset Description

[An Overview of number of instances, number and types of attributes.]

### 1.1 FEATURE EXPLORATION

[Plots with remarks]

[Table of Metrics]

### 1.2 Meta-features Description

[Table of Meta-features]

[Plots with remarks]

# 2 Optimized Model

### 2.1 Preprocessing

[Pipeline and heuristics exploited]

### 2.2 FEATURE ENGINEERING

[Pipeline and heuristics exploited]

#### 2.3 Models

[A paragraph with each model's: a.algorithm name b.optimized hyperparameters]

### 2.4 Ensemble

[Pipeline Description of models in ensemble ]

# 3 EVALUATION

#### 3.1 Optimization Evaluation

[Compare with caret's autotune and random search (Time and Accuracy) Evaluate model of hyperparameter prediction]

#### 3.2 Optimized Model Evaluation

[ A paragraph for each test case: a. test description (e.g. ROC, accuracy with 10-fold CV) b. test result (plor or metric)]