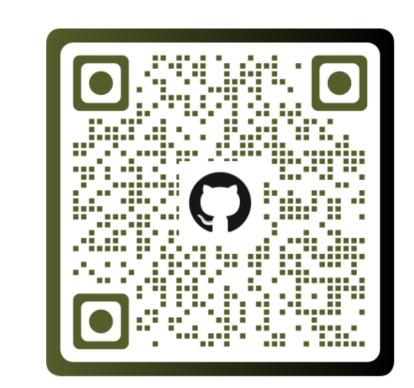


# forester: growing transparent tree-based models for everyone

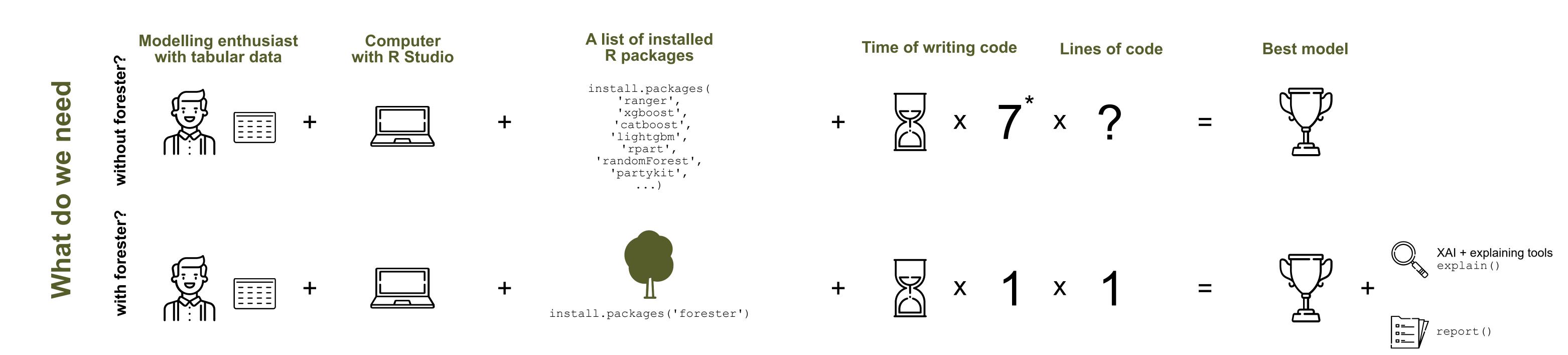
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Let's talk about AutoML, tree-based models, explainable AI (XAI), exploratory data analysis (EDA)!



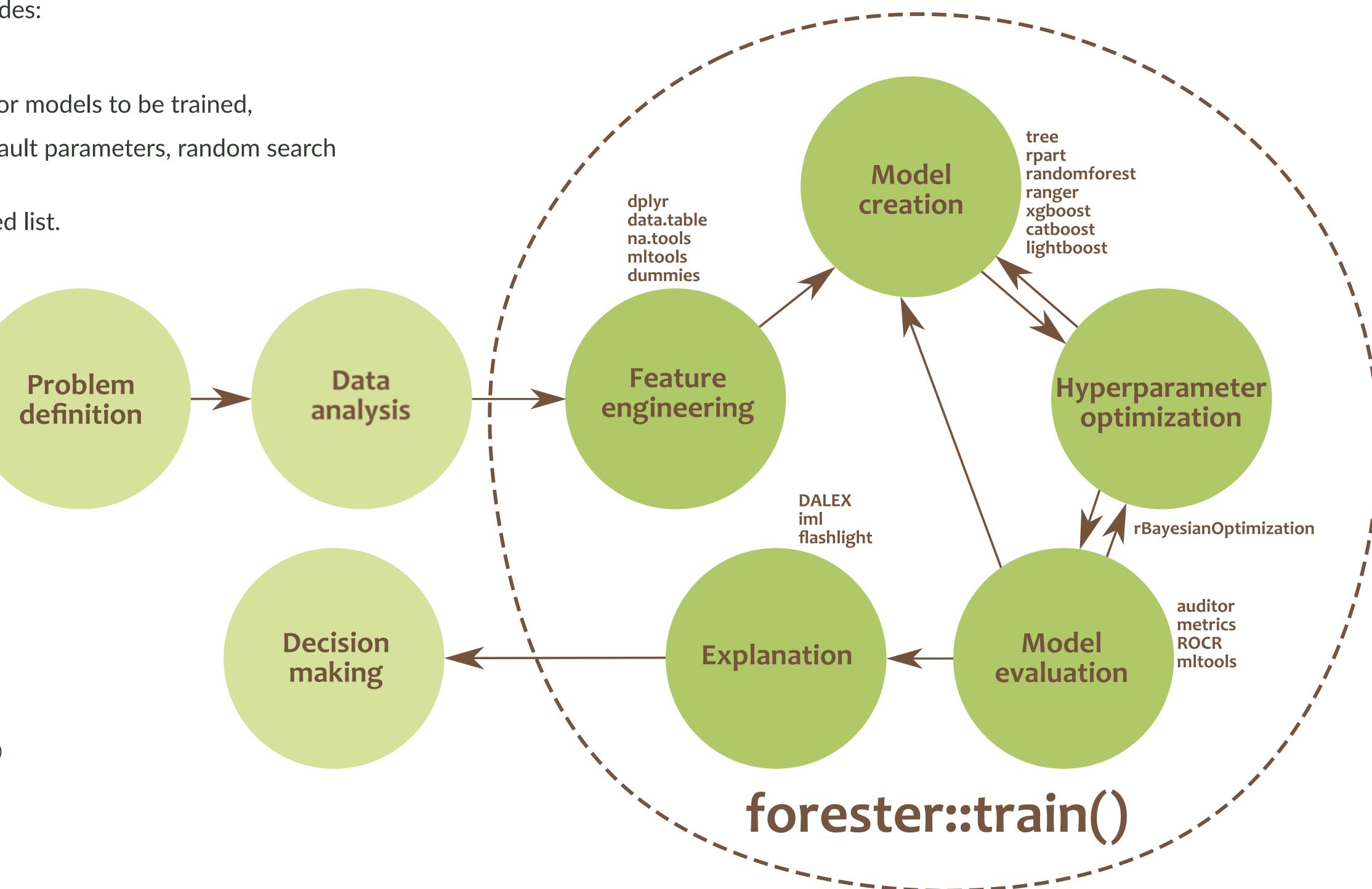
How to build tree-based models in R?

#### What is forester?

- **§** full automation of the process of training tree-based models
- **a** no demand for ML expertise
- powerful tool for making high-quality baseline models for experienced users

The forester package is an AutoML tool in R that wraps up all machine learning processes into a single train() function, which includes:

- 1. rendering a brief **data check** report,
- 2. preprocessing initial dataset enough for models to be trained,
- **3. training** 5 tree-based models with default parameters, random search and Bayesian optimisation,
- 4. evaluating them and providing a ranked list.



## How to use it?

library(forester)
data('lisbon')
train\_output <- train(lisbon, 'Price')</pre>

### For whom is this package created?

The *forester* package is designed for beginners in data science, but also for more experienced users. They get an easy-to-use tool that can be used to prepare high-quality baseline models for comparison with more advanced methods or a set of output parameters for more thorough optimisations.

#### **Prepare meaningful report less than in 60 seconds!**

As data scientists, we are fully aware that there are some time expensive processes in out work. One of them is creating a report with meaningful results. That's why one of the most powerful *forester* feature, which makes it a efficient tool for both experienced users and the newcomers, is a report () function. This single-line command is designed to **provide a holistic view on the outcomes of the ML process** happening inside of the *forester*.

### **Contact info**

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 https://github.com/ModelOriented/forester

#### References

P. Biecek. DALEX: Explainers for Complex Predictive Models in R. Journal of Machine Learning Research, 19(84):1-5, 2018. URL https://jmlr.org/papers/v19/ 18-416.html.

A. Kozak, H. Ruczyński, P. Słowakiewicz, A. Grudzień, and P. Biecek. forester: Quick and Simple Tools for Training and Testing of Tree-based Models, 2022. URL https: //github.com/ModelOriented/forester. R package version 1.0.0.

#### See the report yourself!

