

Universität Regensburg

FAKULTÄT FÜR BIOLOGIE UND VORKLINISCHE MEDIZIN Professur für Theoretische Ökologie

Prof. Dr. Florian Hartig

Telefon +49 941 943-4316 Telefax +49 941 943-3106

Universitätsstraße 31 93053 Regensburg

CERTIFICATE OF ATTENDANCE

This is to certify that

ALEXANDER GLÖTZL

hat successfully particiated in Blockkurs 139024

"Machine Learning and Deep Learning with R"

The course consisted of **5 full days (40h)** of lectures, exercises and group work and was held **July 3rd – 7th 2023**.

Topics covered in the course include:

Data cleaning and preparation; overview of ML tasks (Regression and classification, supervised, unsupervised, reinforcement), standard algorithms: SVM, RF, KNN, BRT, NNs; the ML pipeline, including feature selection, hyperparameter tuning, training under (nested) (cross)validation, predictions, deep learning for regression and classification (DNNs, CNNs), xAI, advanced algorithms (RNN, GAN, VAE, reinforcement-learning)

Regensburg, 11. Juli 23 Prof. Dr. Florian Hartig