The Center for Statistics in Oldenburg and Bremen (ZeSOB) organizes its third

Methods Week in Statistics

from March 13th to 16th, 2023, at the University of Bremen, Building SFG, Lecture Hall SFG 1040, on the topic:

"Interpretable Machine Learning"

The course is targeted to practitioners and application-oriented statisticians interested in machine learning. We will start with a (brief) introduction to machine learning and cover a broad range of interpretability methods such as partial dependence plots, feature importance and Shapley values. The workshop will be split into theory sessions, i.e. lectures, and practical sessions in R. We encourage participants to **bring their own datasets** to be analyzed in the practical sessions.

Prerequisites:
- Background in statistics (no specific knowledge in machine learning necessary)
- A laptop with R installed or access to e.g. RStudio Server
- Your own dataset. If you don't have one, bring a publicly available dataset that you find interesting

Lecturers:

Marvin N. Wright, BIPS Bremen & University of Bremen & University of Copenhagen
Julia Herbinger, LMU Munich

Registration fees:

Bachelor and master students:	free of charge	
Participation type	*onsite*	*online*
Academic employees (including doctoral researchers):	75€	40€
Non-academic attendants:	150€	80€

The registration fee covers course material (slides in PDF format for password-protected download), as well as drinks and snacks during the coffee breaks.
Please register via email to: zesob22@uni-bremen.de until **Tuesday, February 28th, 2023** and specify the following information: **first and second name, invoice address, registration category** (student, academic, non-academic), **and participation type** (online or onsite).
The registration becomes active once the registration fee is transferred to the bank account which you will find on the invoice. Important: Please provide the **invoice number, invoice date and your name** in the reference of your bank transfer!

This is a catch-up of the methods week from September 2022, which had to be cancelled. Those who have registered and payed for the previous date, remain registered under the previous conditions, if they have not asked us to cancel their registration. The latter requires a new registration under the current conditions.

Program of the ZeSOB Methods Week in Statistics on Interpretable Machine Learning:

Monday, 13.03.2023

13.45h	Welcome (ZeSOB team)
14.00h – 17.00h (with 30 minutes coffee break)	Introduction to machine learning

Tuesday, 14.03.2023

09.00h – 12.00h (with 30 minutes coffee break)	Feature effects
12.00h – 13.30h	Lunch break
13.30h – 16.30h (with 30 minutes coffee break)	Feature importance
16.30h – 17.00h	Q&A
18.00h – 22.00h	Dinner (self-financed, place to be announced)

Wednesday, 15.03.2023

09.00h – 12.00h (with 30 minutes coffee break)	Local explanations
12.00h – 13.30h	Lunch break
13.30h – 16.30h (with 30 minutes coffee break)	Shapley values
16.30h – 17.00h	Q&A
18.00h – 22.00h	Dinner (self-financed, place to be announced)

Thursday, 16.03.2023

09.00h – 12.00h (with 30 minutes coffee break)	Presentations and discussion