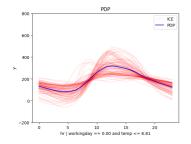
Interpretable Machine Learning

Feature Effects Further Resources and Software



Learning goals

- Learn about further resources
- Get an overview of software packages in R and Python



RESOURCES AND SOFTWARE:

Individual Conditional Expectation (ICE)

- The paper:

 **Goldstein et al." 2015
- R packages: → "iml" n.d.; → "pdp" n.d.; → "ICEbox" n.d.
- Python packages: "PiML" n.d. ; "sklearn" n.d.

Partial Dependence (PD) plot

- R packages: ► "iml" n.d. ; ► "pdp" n.d. ; ► "DALEX" n.d.
- Python packages: ▶ "sklearn" n.d. ; ▶ "effector" n.d. ; ▶ "PDPbox" n.d.

Accumulated Local Effect (ALE)

- The paper: "Apley et al." 2020
- Chapter in Interpretable Machine Learning book: → "Molnar" 2025
- R packages: ► "ALEPlot" n.d.; ► "iml" n.d.
- Python packages: ▶ "effector" n.d.; ▶ "PiML" n.d.; ▶ "ALEPython" n.d.; ▶ "Alibi" n.d.

Regional effect plots (REPID)

- The paper: "Herbinger et al." 2022
- Codebase: repid" n.d.

