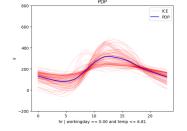
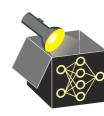
# **Interpretable Machine Learning**

# Feature effects: Further Resources and Software



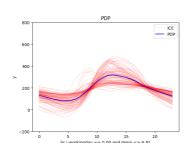
# Learning goals

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



# **Interpretable Machine Learning**

# Feature Effects Further Resources and Software



# Learning goals

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# **RESOURCES AND SOFTWARE:**

# Individual Conditional Expectation (ICE)

- The paper: ► Goldstein et al. 2015
- Chapter in Interpretable Machine Learning book: ► Molnar 2025
- R packages: ▶ iml; ▶ pdp; ▶ ICEbox
- Python packages: ► PiML ; ► sklearn

#### Partial Dependence (PD) plot

- Chapter in Interpretable Machine Learning book: Molnar 2025
- R packages: ▶ iml; ▶ pdp; ▶ DALEX
- Python packages: ▶ sklearn ; ▶ effector ; ▶ PDPbox

#### Accumulated Local Effect (ALE)

- The paper: ► Apley et al. 2020
- Chapter in Interpretable Machine Learning book: Molnar 2025
- Python packages: ▶ effector ; ▶ PiML ; ▶ ALEPython : ▶ Alibi

# Regional effect plots (REPID)

- The paper: Herbinger et al. (2022)
- Codebase: ▶ repid



## **RESOURCES AND SOFTWARE:**

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- R packages: ▶ iml n.d.; ▶ pdp n.d.; ▶ DALEX n.d.
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## Accumulated Local Effect (ALE)

- The paper: Apley 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 2022

