Real World Applications

Identifying academically vulnerable learners in first-year science programmes

In day05a-vulnerable-learners.ipynb, we train (propositional) symbolic models aiming to identify academically vulnerable learners in first-year science programmes at a South African higher-education institution.

This is based on the paper: Identifying academically vulnerable learners in first-year science programmes at a South African higher-education institution

Interpretable land cover classification with modal decision trees (extra)

In day05b-land-cover-classification.ipynb , you can find an example of (multi-modal) symbolic learning models trained to classify land coverage, a segmentation problem aiming to recognize what can be found in a satellite image.

This is based on the paper: Interpretable land cover classification with modal decision trees

To run this notebook, you first need to download the following datasets and place them in the `/datasets/paviaU` folder:

- Pavia University
- Pavia University GT