

Anchor Explanations

Sufficient Conditions with High Precision



ANCHOR RULE EXAMPLE

IF

Age > 30

AND

Income > 50K

THEN

Approve

PRECISION

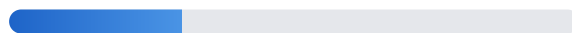
0.95



Accuracy when rule applies

COVERAGE

0.30



Fraction of instances covered

Covered Region Visualization

Key Features

Advantages

- ✓ More stable than LIME
- ✓ Human-readable rules
- ✓ High confidence regions
- ✓ Less perturbation-sensitive

Sufficient Conditions

Rules that guarantee prediction

Precision Metric

Rule accuracy on samples

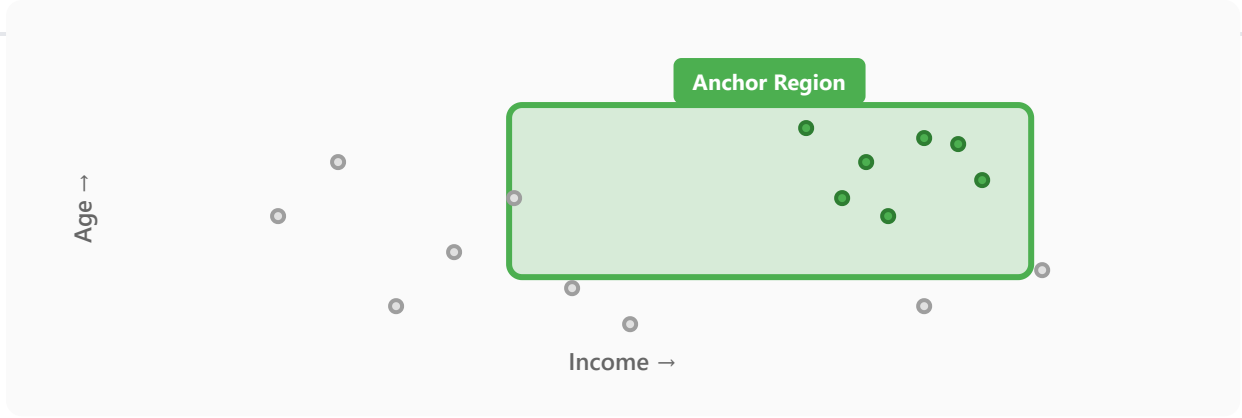
Coverage Metric

Fraction where rule applies

Beam Search

Finds optimal anchor rules

Implementation



Python: anchor package
(integrated with Alibi library)