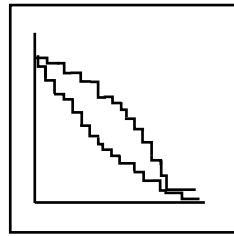


Tutorial 3.2: Survival Analysis



(i) Import libraries

Import sksurv, pandas, numpy and sklearn

(ii) Load flux and survival data

Load fluxes as X and survival as Y

(iii) Define training/test sets

Specify proportion of test set and choose optimal combination of hyperparameters

(iv) Normalize data via feature scaling

Perform feature scaling on the flux data (X)

(v) Fit training data to CoxPH model

Estimate time-to-event by applying Cox regression to X and Y training samples

(vi) Fit test data to CoxPH model

Predict survival by applying training estimator on X test samples

(vii) Evaluate model fit using C-index

Validate the predictive ability of the survival model using Harrell's concordance index on Y test samples