

# used cars

Risk

$10^0$

$10^{-1}$

$10^{-2}$

0

20

40

60

80

100

Cognitive Complexity

Proposed algorithm:

+5245 if  $PS \geq 120$  & year  $\geq 2005$

+6779 if  $km \leq 125000$  & year  $\geq 2011$

+7451 if count  $\leq 150$  &  $PS \geq 220$

+3932 if year  $\geq 2000$

+6001 if  $PS \geq 160$  & year  $\geq 2008$

+12621 if count  $\leq 150$  &  $PS \geq 160$  & year  $\geq 2015$

Gradient Boosting / XGBoost:

+18418 if  $PS \geq 120$  & year  $\geq 2005$

+13919 if count  $\leq 69$  &  $km \leq 125000$  &  $PS \geq 220$  & year  $\geq 2011$

- 8545 if  $120 \leq powerPS \leq 160$  &  $2005 \leq year \leq 2011$

+2769 if True

- 4150 if count  $\geq 18$  &  $km \geq 50000$  &  $PS \geq 120$  & year  $\geq 2005$

+2826 if count  $\geq 18$  &  $km \leq 100000$  & year  $\geq 2008$

+5878 if count  $\leq 150$  &  $km \geq 125000$  &  $PS \geq 220$  & year  $\leq 2005$

- 10356 if  $km \leq 125000$  &  $PS=220$  & year  $\geq 2011$

SIRUS

GS

GB / XGB

FCOGB

train

test