

GPTIPS pareto front report

26-Apr-2019 17:20:04

Config file: Y8_config.m

Number of models on front: 6

Total models: 100

This report shows the expressional complexity/performance characteristics (on training data) of symbolic models on the pareto front.

Numerical precision is reduced for display purposes.

Click on column headers to sort models by expressional complexity and goodness of fit (R^2).

Model ID	Goodness of fit (R^2)	Model complexity	Model
1	0.953	172	$0.992 x_1 - 2.29 x_2 - 0.0222 x_3 + 0.046 x_4 - 0.00419 x_1 (x_1 + x_4) + 9.53e-4 x_4 (x_2 + x_3) + 4.62e-4 (x_2 - 1.0 x_4) (x_2 + 2.0 x_3 + x_4) - 0.0692 x_1 x_2 + 9.95e-5 x_1 x_3 + 0.00467 x_1 (x_4 + x_2^2) + 5.41e-5 x_2^3 (x_1 + x_4) + 0.00785 x_2^3 - 9.95e-5 x_1 x_2 x_4 - 0.118$
7	0.971	188	$0.171 x_4 - 13.1 x_2 - 0.0238 x_3 - 0.351 x_1 + 0.00106 x_4 (x_2 + x_3) + 5.22e-4 (x_2 - 1.0 x_4) (x_2 + 2.0 x_3 + x_4) + 0.0702 x_1 x_2 - 2.75e-4 x_1 x_3 - 0.00367 x_1 (x_4 + x_2^2) - 1.36e-4 x_2^3 (x_1 + x_4) + 0.0781 x_2^3 + 3.9e-4 x_1 (x_3 + 3.0 x_4) + 2.75e-4 x_1 x_2 x_4 + 91.1$
14	0.97	180	$0.221 x_4 - 11.6 x_2 - 0.0238 x_3 - 0.357 x_1 + 0.00106 x_4 (x_2 + x_3) + 5.19e-4 (x_2 - 1.0 x_4) (x_2 + 2.0 x_3 + x_4) + 0.084 x_1 x_2 - 3.51e-4 x_1 x_3 - 0.00439 x_1 (x_4 + x_2^2) - 0.0021 x_2^2 (x_1 + x_4) + 0.0728 x_2^3 + 4.65e-4 x_1 (x_3 + 3.0 x_4) + 3.51e-4 x_1 x_2 x_4 + 83.0$
23	0.947	110	$3.56e-5 x_4 (x_2 + x_3) - 6.39 x_2 - 0.0153 x_3 - 0.0514 x_4 - 0.181 x_1 + 0.00603 x_1 x_2 + 2.6e-6 x_1 x_3 + 0.0388 x_2^3 + 9.56e-5 x_1 (x_3 + 3.0 x_4) - 2.6e-6 x_1 x_2 x_4 + 66.7$
60	0.971	182	$0.171 x_4 - 13.1 x_2 - 0.0238 x_3 - 0.351 x_1 + 0.00106 x_4 (x_2 + x_3) + 5.22e-4 (x_2 - 1.0 x_4) (x_2 + 2.0 x_3 + x_4) + 0.0702 x_1 x_2 - 2.75e-4 x_1 x_3 - 0.00367 x_1 (x_4 + x_2^2) - 1.36e-4 x_2^3 (x_1 + x_4) + 0.0781 x_2^3 + 3.9e-4 x_1 (x_3 + 3.0 x_4) + 2.75e-4 x_1 x_2 x_4 + 91.1$
64	0.963	174	$0.0328 x_4 - 7.02 x_2 - 0.0253 x_3 - 0.2 x_1 + 0.00104 x_4 (x_2 + x_3) + 5.03e-4 (x_2 - 1.0 x_4) (x_2 + 2.0 x_3 + x_4) + 0.00627 x_1 x_2 + 3.11e-5 x_1 x_3 + 2.08e-5 x_2^3 (x_1 + x_4) + 0.0343 x_2^3 + 9.08e-5 x_1 (x_3 + 3.0 x_4) - 3.11e-5 x_1 x_2 x_4 + 71.7$

GPTIPS - the symbolic data mining platform for MATLAB

© Dominic Searson 2009-2015

