

GPTIPS pareto front report

17-Apr-2019 23:25:43

Config file: Y6_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
25	0.925	282	$613.0 x_1 (x_1 + x_2) - 97.3 x_2 - 711.0 x_3 - 5177.0 x_1 - 6.78e4 x_3 (x_1 + x_3) + 1.48e5 x_3 (x_1 - 1.0 x_3) + 281.0 x_3 (x_1 + x_2 + x_2 x_3) + 529.0 x_1 (x_2 + 1.0) (x_3 - 1.0 x_1 + x_1 x_3) + 2.64 (x_2 + x_3) (x_1 - 1.0 x_3) (x_1 - 1.0 x_2 + x_1 x_2) + 2377.0$
34	0.98	351	$839.0 x_1 + 361.0 x_2 + 5.35e4 x_3 + 2.64 x_1^2 x_2^2 - 940.0 x_1 x_2 - 1.99e5 x_1 x_3 - 4499.0 x_2 x_3 - 2.64 x_1 x_2^2 + 301.0 x_1^2 x_2 - 3199.0 x_1^2 x_3 + 2.64 x_1^3 x_2 - 4499.0 x_2 x_3^2 + 19.2 x_2^2 x_3 + 1.13e4 x_1^2 + 2.64 x_1^3 + 3.14e5 x_3^2 - 19.2 x_1 x_2^2 x_3 - 3199.0 x_1^2 x_2 x_3 + 1.14e4 x_1 x_2 x_3 + 6055.0$
37	0.968	313	$1.2e4 x_1 + 50.7 x_2 - 822.0 x_3 + 2.4 x_1^2 x_2^2 + 20.4 x_1 x_2 - 1.86e5 x_1 x_3 - 3244.0 x_2 x_3 - 2.4 x_1 x_2^2 - 261.0 x_1^2 x_2 - 2.4 x_1 x_3^2 + 2.4 x_1^2 x_3 - 3244.0 x_2 x_3^2 + 19.7 x_2^2 x_3 + 873.0 x_1^2 + 4.06e5 x_3^2 - 2.4 x_1 x_2 x_3^2 - 19.7 x_1 x_2^2 x_3 + 2.4 x_1^2 x_2 x_3 + 6277.0 x_1 x_2 x_3 + 8999.0$
48	0.981	353	$344.0 x_2 - 3000.0 x_1 - 8422.0 x_3 + 2.79 x_1^2 x_2^2 - 908.0 x_1 x_2 - 1.88e5 x_1 x_3 - 4544.0 x_2 x_3 - 2.79 x_1 x_2^2 + 286.0 x_1^2 x_2 - 2.79 x_1 x_3^2 - 3277.0 x_1^2 x_3 - 4544.0 x_2 x_3^2 + 19.9 x_2^2 x_3 + 1.2e4 x_1^2 + 4.45e5 x_3^2 - 2.79 x_1 x_2 x_3^2 - 19.9 x_1 x_2^2 x_3 - 3277.0 x_1^2 x_2 x_3 + 1.16e4 x_1 x_2 x_3 + 1.33e4$
55	0.978	321	$346.0 x_2 - 1200.0 x_1 + 8.58e4 x_3 + 2.1 x_1^2 x_2^2 - 988.0 x_1 x_2 - 1.76e5 x_1 x_3 - 4066.0 x_2 x_3 - 2.1 x_1 x_2^2 + 378.0 x_1^2 x_2 - 3100.0 x_1^2 x_3 + 2.1 x_1^3 x_2 - 4066.0 x_2 x_3^2 + 16.9 x_2^2 x_3 + 1.06e4 x_1^2 + 2.1 x_1^3 + 1.69e5 x_3^2 - 16.9 x_1 x_2^2 x_3 - 3100.0 x_1^2 x_2 x_3 + 1.07e4 x_1 x_2 x_3 + 4222.0$
68	0.945	307	$6.4e4 x_3 (x_1 - 1.0 x_3) - 2.05e4 x_3 (x_1 + x_3) - 1911.0 x_1 - 3.34e4 x_1 x_3 - 93.1 x_3 (x_1 + x_2 + x_2 x_3) - 1699.0 x_2^2 x_3 + 1699.0 x_2 x_3 (x_1 + x_2) + 58.0 x_1 (x_2 + 1.0) (x_3 - 1.0 x_1 + x_1 x_3) + 0.461 (x_2 + x_3) (x_1 - 1.0 x_3) (x_1 - 1.0 x_2 + x_1 x_2) + 5744.0$

GPTIPS - the symbolic data mining platform for MATLAB

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