GPTIPS tree structure report
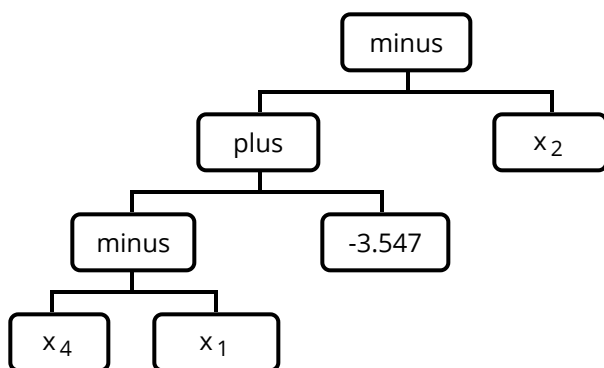
For best model on training data.

30-Apr-2019 17:18:58
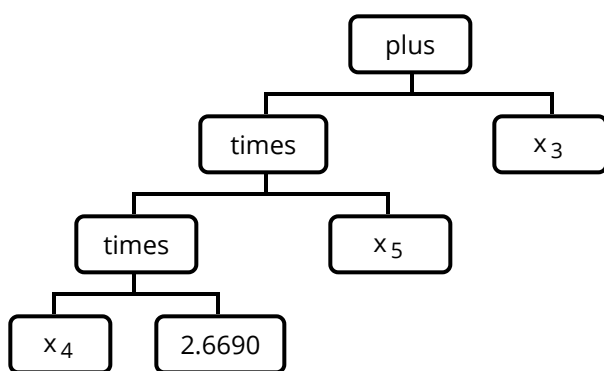
Tree 1

nodes = 7 depth = 4 complexity = 19
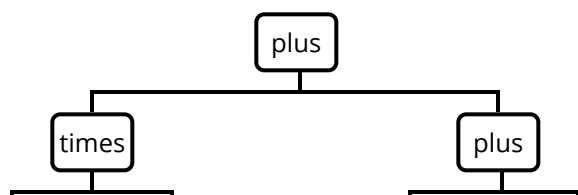
```
            minus
          /       \
       plus        x₂
      /    \
   minus   -3.547
   /   \
  x₄    x₁
```

Tree 2

nodes = 7 depth = 4 complexity = 19

```
            plus
          /      \
       times       x₃
      /     \
   times    x₅
   /    \
  x₄   2.6690
```

Tree 3

nodes = 11 depth = 4 complexity = 33

```
            plus
          /      \
       times     plus
```

```
[x₁]    [times]        [minus]    [x₃]
         |               |
     [x₄] [2.6690]   [x₁] [x₁]
```
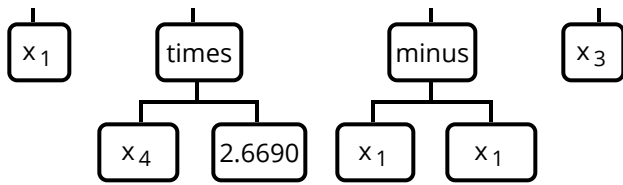
Tree 4

nodes = 1 depth = 1 complexity = 1

```
[ x₄ ]
```

Tree 5

nodes = 13 depth = 4 complexity = 41

```
              [plus]
           /         \
      [minus]        [times]
      /     \        /      \
 [minus]  [times] [x₂]   [minus]
  /  \     /   \           /    \
[x₄][x₂] [x₄][x₃]       [x₅]  [x₂]
```

Tree 6

nodes = 13 depth = 4 complexity = 41

```
              [plus]
           /         \
      [times]        [plus]
      /     \        /      \
 [plus]  [minus] [times]  [x₄]
  /  \     /   \   /   \
[x₃][x₁] [x₃][x₁][x₅][x₄]
```
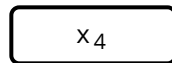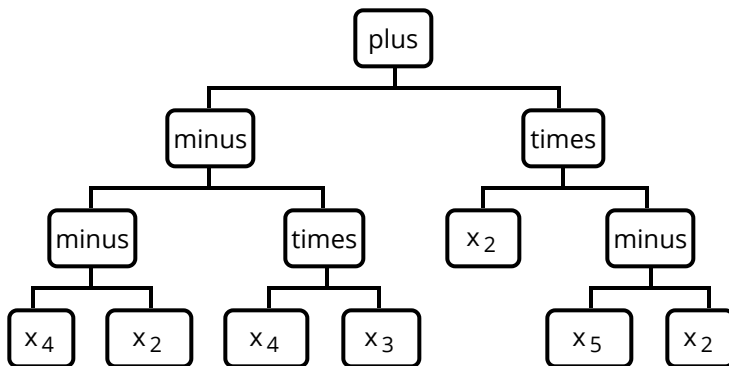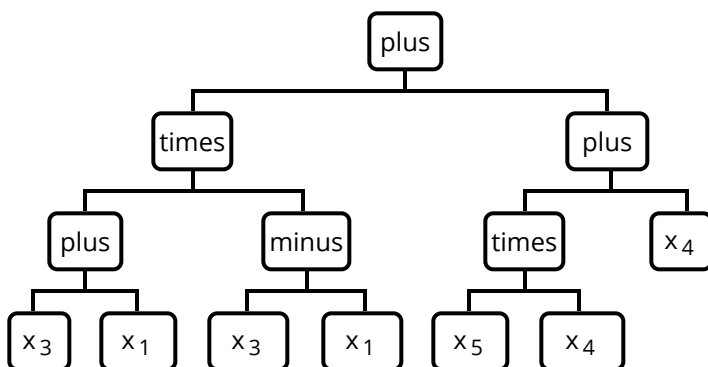
Tree 7

nodes = 1 depth = 1 complexity = 1

x_5

Tree 8

nodes = 9 depth = 4 complexity = 27

```
              minus
          /          \
      times           x₄
     /      \
  minus     times
  /   \     /    \
 x₄   x₂   x₁    x₃
```

minus
- times
  - minus
    - x_4
    - x_2
  - times
    - x_1
    - x_3
- x_4

Tree 9

nodes = 13 depth = 4 complexity = 41

minus
- times
  - times
    - x_2
    - x_3
  - x_3
- times
  - minus
    - x_3
    - x_5
  - minus
    - x_4
    - x_2
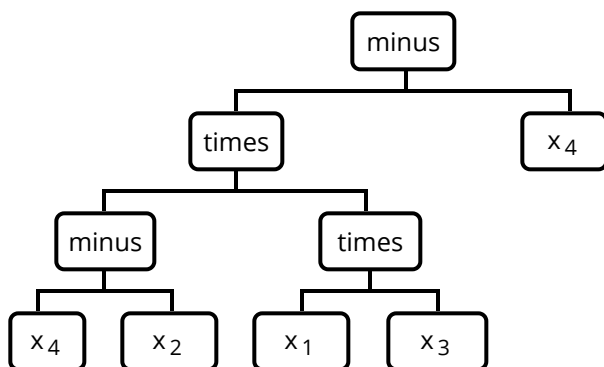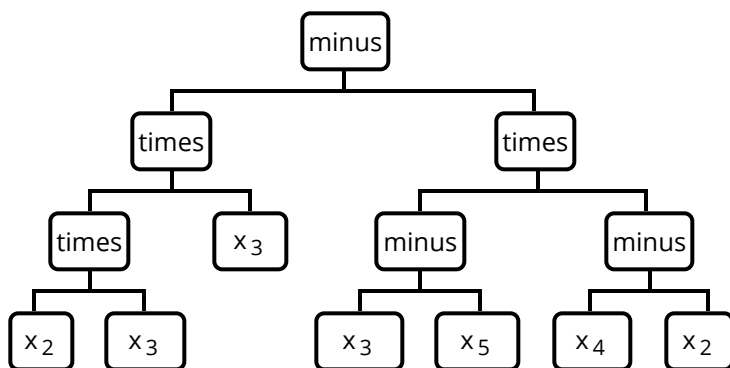
Tree 10

nodes = 15 depth = 4 complexity = 49

times
- minus
  - plus
  - times
- times
  - minus
  - plus
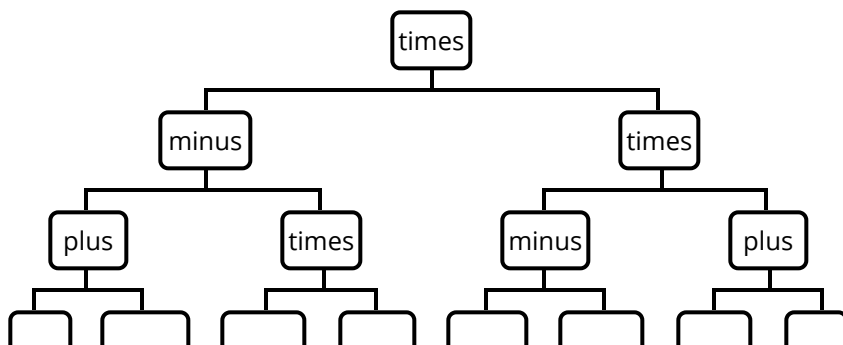
x_5 -9.434 x_5 x_3 x_4 x_5 x_3 x_5

Tree 11

nodes = 7 depth = 3 complexity = 17

```
              minus
         ┌──────┴──────┐
       plus          times
      ┌──┴──┐       ┌───┴───┐
     x₁    x₅      x₃      x₅
```

minus
  plus
    x_1 x_5
  times
    x_3 x_5
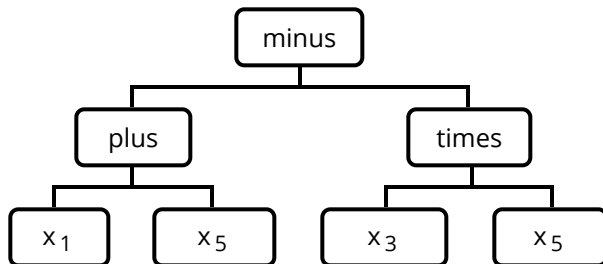
GPTIPS - the symbolic data mining platform for MATLAB

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