



Histogram/Table of results. On average it was -4 imps

Eval imp (-par):Mean: -4.0725 Stddev: 4.884899563962396 Median: -4.0

Unnecessary complicated rules: (P with all # of diamonds..)

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| | |--- ♣ > 1.50
| | | |--- ♦ <= 1.50
| | | |--- class: P
| | | |--- ♦ > 1.50
| | | |--- class: P

```

→ move to using Quinlan's C4.5 instead of Scikit-learn's binary tree CART

Some of the recommended bids (removed with < 3 training examples):

	11	12	13	14	15	16	17	18	19	20	21
5-35	P + P + P	■	P	■	P	■	2♠	—			
5-44	2♦ + P + P	■	3N	■	P	■	P	■			
5-53	P + P + P	■	P	■	P	■	P	■			
5125	P + P + P + 4♠ + 4♠ + 4♠	■	4♠	■	2♠	■	2♠	—			
5134	P + P + P + P + P + 4♠ + 4♠ + 4♠	■	3N	■	6N	■					
5143	P + P + P + 3N + 3N + 3N + 3N + 4♠ + 6N	■	6N	—							

5152 2♦+2♦+2♦+3N+3N+3N+3N 6N
 5215 2♣+2♣+5♣+3N+3N+3N+3N 3N
 5224 P+P+P+3N+3N+3N+3N+3N+4♠+6N
 5233 P+P+P+3N+3N+3N+3N+3N+3N+6N
 5242 2♦+2♦+2♦+3N+3N+3N+3N+3N+3N
 5251 P+2♦+2♦+2♦+2♠+2♠ 5♦ 5♦ 6N
 53-5 5♣+P P 2♥ 2♥ 2♥
 5314 P+P+3N+3N+3N+3N+3N+2♥ 2♥ 2♥
 5323 3N+3N+3N+3N+3N+3N+3N+3N+3N+3♣
 5332 P+P+3N+3N+3N+3N+3N+3N+3N+3N
 5341 P+2♥+3N+3N+3N+3N+5♦+5♦ 3N 3N
 535- P 2♥+2♥+2♥ 3N 5♦
 54-4 4♥+4♥ 2♣+2♣ 2♣ 2♥ 2♥
 5413 P+4♥+4♥+4♥+3N+3N+3N+3N 3N 3♣
 5422 P+P+P+4♥+4♥+3N+3N+3N+3N
 5431 P+2♥+2♥+2♥+2♥+3N+2♥ 3N 2♣
 544- 2♥+2♥+2♥+2♥ 2♥ 2♥ 2♥
 55-3 4♥+4♥ 4♥ 4♥ 4♥ 4♥
 5512 4♥+4♥+4♥+4♥+4♥+4♥+4♥+4♥
 5521 4♥+4♥+4♥+4♥+4♥+4♥+4♥ 2♣ 2♣
 553- 2♥ 2♥+2♥ 2♥ 2♥ 2♥
 6-16
 6-25 P P 3♠ 3♠
 6-34 P P 4♠ 3♠
 6-43 4♠+4♠+4♠ 4♠ 4♠
 6-52 4♠ 4♠ 4♠ 4♠

The learning:

