

1. Title: Relative CPU Performance Data
2. Source Information
 - Creators: Phillip Ein-Dor and Jacob Feldmesser
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Tel Aviv, 69978; Israel
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 - Date: October, 1987
3. Past Usage:
 1. Ein-Dor and Feldmesser (CACM 4/87, pp 308-317)
 - Results:
 - linear regression prediction of relative cpu performance
 - Recorded 34% average deviation from actual values
 2. Kibler, D. & Aha, D. (1988). Instance-Based Prediction of Real-Valued Attributes. In Proceedings of the CSCSI (Canadian AI) Conference.
 - Results:
 - instance-based prediction of relative cpu performance
 - similar results; no transformations required
 - Predicted attribute: cpu relative performance (numeric)
4. Relevant Information:
 - The estimated relative performance values were estimated by the authors
using a linear regression method. See their article (pp 308-313) for
more details on how the relative performance values were set.
5. Number of Instances: 209
6. Number of Attributes: 10 (6 predictive attributes, 2 non-predictive,
1 goal field, and the linear regression's
guess)
7. Attribute Information:
 1. vendor name: 30
(adviser, amdahl, apollo, basf, bti, burroughs, c.r.d, cambex,
cdc, dec,
dg, formation, four-phase, gould, honeywell, hp, ibm, ipl,
magnuson,
microdata, nas, ncr, nixdorf, perkin-elmer, prime, siemens,
sperry,
sratus, wang)
 2. Model Name: many unique symbols
 3. MYCT: machine cycle time in nanoseconds (integer)
 4. MMIN: minimum main memory in kilobytes (integer)
 5. MMAX: maximum main memory in kilobytes (integer)
 6. CACH: cache memory in kilobytes (integer)
 7. CHMIN: minimum channels in units (integer)
 8. CHMAX: maximum channels in units (integer)
 9. PRP: published relative performance (integer)
 10. ERP: estimated relative performance from the original article
(integer)
8. Missing Attribute Values: None

9. Class Distribution: the class value (PRP) is continuously valued.

PRP Value Range: Number of Instances in Range:

0-20	31
21-100	121
101-200	27
201-300	13
301-400	7
401-500	4
501-600	2
above 600	4

Summary Statistics:

	Min	Max	Mean	SD	PRP Correlation
MCYT:	17	1500	203.8	260.3	-0.3071
MMIN:	64	32000	2868.0	3878.7	0.7949
MMAX:	64	64000	11796.1	11726.6	0.8630
CACH:	0	256	25.2	40.6	0.6626
CHMIN:	0	52	4.7	6.8	0.6089
CHMAX:	0	176	18.2	26.0	0.6052
PRP:	6	1150	105.6	160.8	1.0000
ERP:	15	1238	99.3	154.8	0.9665