=== Run information ===

Scheme: weka.classifiers.meta.AttributeSelectedClassifier -E "weka.attributeSelection.ReliefFAttributeEval -M -1 -D 1 -K 10" -S "weka.attributeSelection.Ranker -T -1.7976931348623157E308 -N -1" -W weka.classifiers.functions.LinearRegression -- -S 0 -R 1.0E-8

Relation: Rand\_FeatureFileAllMT\_Reg

Instances: 1000

Attributes: 43

Bi\_lemma\_overlap\_count

Dist\_Sim\_Adj

Dist\_Sim\_Noun

Dist\_Sim\_Verb

LIWC\_Catg\_Achievement

LIWC\_Catg\_Affective Processes

LIWC\_Catg\_Biological Processes

LIWC\_Catg\_Causation

LIWC\_Catg\_Certainty

LIWC\_Catg\_Cognitive Processes

LIWC\_Catg\_Discrepancy

LIWC\_Catg\_Family

LIWC\_Catg\_Hear

LIWC\_Catg\_Humans

LIWC\_Catg\_Insight

LIWC\_Catg\_Motion

LIWC\_Catg\_Negative Emotion

LIWC\_Catg\_Perceptual Processes

LIWC\_Catg\_Positive Emotion

LIWC\_Catg\_Relativity

LIWC\_Catg\_Religion

LIWC\_Catg\_See

LIWC\_Catg\_Sexual

LIWC\_Catg\_Social Processes

LIWC\_Catg\_Tentative

LIWC\_Catg\_Time

LIWC\_Catg\_Work

Lev\_Dist

MeanSimLabel

Tri\_lemma\_overlap\_count

UMBC

Uni\_lemma\_overlap\_count

diff\_len

noun\_Path

rouge\_1\_f\_score

rouge\_2\_f\_score

rouge\_3\_f\_score

rouge\_4\_f\_score

rouge\_l\_f\_score

rouge\_s\*\_f\_score

rouge\_su\*\_f\_score

rouge\_w\_1.2\_f\_score

verb\_Path

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

AttributeSelectedClassifier:

=== Attribute Selection on all input data ===

Search Method:

Attribute ranking.

Attribute Evaluator (supervised, Class (numeric): 29 MeanSimLabel):

ReliefF Ranking Filter

Instances sampled: all

Number of nearest neighbours (k): 10

Equal influence nearest neighbours

Ranked attributes:

0.012949 3 Dist\_Sim\_Noun

0.009857 31 UMBC

0.009013 24 LIWC\_Catg\_Social Processes

0.008951 4 Dist\_Sim\_Verb

0.008223 14 LIWC\_Catg\_Humans

0.007941 34 noun\_Path

0.007592 5 LIWC\_Catg\_Achievement

0.007244 32 Uni\_lemma\_overlap\_count

0.007234 9 LIWC\_Catg\_Certainty

0.005686 43 verb\_Path

0.005576 11 LIWC\_Catg\_Discrepancy

0.00509 8 LIWC\_Catg\_Causation

0.005068 10 LIWC\_Catg\_Cognitive Processes

0.004609 20 LIWC\_Catg\_Relativity

0.004531 1 Bi\_lemma\_overlap\_count

0.00406 18 LIWC\_Catg\_Perceptual Processes

0.003441 15 LIWC\_Catg\_Insight

0.002494 27 LIWC\_Catg\_Work

0.002373 12 LIWC\_Catg\_Family

0.002284 13 LIWC\_Catg\_Hear

0.002179 33 diff\_len

0.002153 30 Tri\_lemma\_overlap\_count

0.001876 28 Lev\_Dist

0.001859 26 LIWC\_Catg\_Time

0.001813 38 rouge\_4\_f\_score

0.001782 37 rouge\_3\_f\_score

0.001777 22 LIWC\_Catg\_See

0.001287 39 rouge\_l\_f\_score

0.001139 40 rouge\_s\*\_f\_score

0.00112 41 rouge\_su\*\_f\_score

0.001109 2 Dist\_Sim\_Adj

0.00106 36 rouge\_2\_f\_score

0.000982 16 LIWC\_Catg\_Motion

0.000935 42 rouge\_w\_1.2\_f\_score

0.000809 35 rouge\_1\_f\_score

0.000786 19 LIWC\_Catg\_Positive Emotion

0.000205 25 LIWC\_Catg\_Tentative

-0.000263 7 LIWC\_Catg\_Biological Processes

-0.000279 17 LIWC\_Catg\_Negative Emotion

-0.000359 23 LIWC\_Catg\_Sexual

-0.000728 6 LIWC\_Catg\_Affective Processes

-0.001138 21 LIWC\_Catg\_Religion

Selected attributes: 3,31,24,4,14,34,5,32,9,43,11,8,10,20,1,18,15,27,12,13,33,30,28,26,38,37,22,39,40,41,2,36,16,42,35,19,25,7,17,23,6,21 : 42

Header of reduced data:

@relation 'Rand\_FeatureFileAllMT\_Reg-weka.filters.unsupervised.attribute.Remove-V-R3,31,24,4,14,34,5,32,9,43,11,8,10,20,1,18,15,27,12-13,33,30,28,26,38,37,22,39-41,2,36,16,42,35,19,25,7,17,23,6,21,29'

@attribute Dist\_Sim\_Noun numeric

@attribute UMBC numeric

@attribute 'LIWC\_Catg\_Social Processes' numeric

@attribute Dist\_Sim\_Verb numeric

@attribute LIWC\_Catg\_Humans numeric

@attribute noun\_Path numeric

@attribute LIWC\_Catg\_Achievement numeric

@attribute Uni\_lemma\_overlap\_count numeric

@attribute LIWC\_Catg\_Certainty numeric

@attribute verb\_Path numeric

@attribute LIWC\_Catg\_Discrepancy numeric

@attribute LIWC\_Catg\_Causation numeric

@attribute 'LIWC\_Catg\_Cognitive Processes' numeric

@attribute LIWC\_Catg\_Relativity numeric

@attribute Bi\_lemma\_overlap\_count numeric

@attribute 'LIWC\_Catg\_Perceptual Processes' numeric

@attribute LIWC\_Catg\_Insight numeric

@attribute LIWC\_Catg\_Work numeric

@attribute LIWC\_Catg\_Family numeric

@attribute LIWC\_Catg\_Hear numeric

@attribute diff\_len numeric

@attribute Tri\_lemma\_overlap\_count numeric

@attribute Lev\_Dist numeric

@attribute LIWC\_Catg\_Time numeric

@attribute rouge\_4\_f\_score numeric

@attribute rouge\_3\_f\_score numeric

@attribute LIWC\_Catg\_See numeric

@attribute rouge\_l\_f\_score numeric

@attribute rouge\_s\*\_f\_score numeric

@attribute rouge\_su\*\_f\_score numeric

@attribute Dist\_Sim\_Adj numeric

@attribute rouge\_2\_f\_score numeric

@attribute LIWC\_Catg\_Motion numeric

@attribute rouge\_w\_1.2\_f\_score numeric

@attribute rouge\_1\_f\_score numeric

@attribute 'LIWC\_Catg\_Positive Emotion' numeric

@attribute LIWC\_Catg\_Tentative numeric

@attribute 'LIWC\_Catg\_Biological Processes' numeric

@attribute 'LIWC\_Catg\_Negative Emotion' numeric

@attribute LIWC\_Catg\_Sexual numeric

@attribute 'LIWC\_Catg\_Affective Processes' numeric

@attribute LIWC\_Catg\_Religion numeric

@attribute MeanSimLabel numeric

@data

Classifier Model

Linear Regression Model

MeanSimLabel =

0.2718 \* Dist\_Sim\_Noun +

3.3752 \* UMBC +

-0.1325 \* LIWC\_Catg\_Social Processes +

-0.3367 \* LIWC\_Catg\_Humans +

0.3478 \* LIWC\_Catg\_Achievement +

0.4806 \* LIWC\_Catg\_Certainty +

-0.1335 \* verb\_Path +

0.2159 \* LIWC\_Catg\_Causation +

0.072 \* LIWC\_Catg\_Relativity +

0.2106 \* Bi\_lemma\_overlap\_count +

0.7698 \* LIWC\_Catg\_Perceptual Processes +

0.2215 \* LIWC\_Catg\_Work +

-0.026 \* diff\_len +

8.0788 \* rouge\_4\_f\_score +

-3.9522 \* rouge\_3\_f\_score +

7.4245 \* rouge\_l\_f\_score +

-1.3735 \* rouge\_s\*\_f\_score +

-0.2679 \* Dist\_Sim\_Adj +

-8.8209 \* rouge\_2\_f\_score +

0.6166 \* LIWC\_Catg\_Motion +

-6.0088 \* rouge\_w\_1.2\_f\_score +

2.6738 \* rouge\_1\_f\_score +

0.5922 \* LIWC\_Catg\_Negative Emotion +

0.195 \* LIWC\_Catg\_Sexual +

-0.2418 \* LIWC\_Catg\_Affective Processes +

0.2484 \* LIWC\_Catg\_Religion +

0.0601

Time taken to build model: 0.55 seconds

=== Cross-validation ===

=== Summary ===

Correlation coefficient 0.5329

Mean absolute error 0.8074

Root mean squared error 1.0067

Relative absolute error 82.3448 %

Root relative squared error 84.7288 %

Total Number of Instances 1000