

RANK #1 (HYBRID MODEL)

This score is achieved by modifying the TF-IDF score and applying the formula as stated in research paper.

More precisely, $\text{New TF-IDF}(\text{Legal Term}) = 2 * \text{Old TF-IDF}(\text{Legal Term})$

and $\text{New TF-IDF}(\text{Non Legal Term}) = \text{Old TF-IDF}(\text{Non Legal Term}) / 2$

We have taken the factor 2 because we wanted to make sure that legal terms should be given more importance than other. This is because most of the Gold summary also prefer summary with legal terms.

Why the number '2'? Through hit and trial the least number which satisfied our goal was '2'. The formula used as

$W_{\text{new}} = W_{\text{old}} + (sd * (1.5 * L + 0.2 * d + 0.3 * e)) / \text{length}(\text{Sentence})$, where

W_{new} : New sentence score

W_{old} : Old sentence score

sd : standard deviation of sentence scores

L : Number of legal terms in the sentence

d : Total count of numeric digits (like year, case number, act, sec, rule etc)

e : number of entities present in the sentences

File Name	Rouge-1 F	Rouge-2 F	Rouge-L F
1953_24.txt	0.210953343	0.062439021	0.139293835
1953_28.txt	0.233846149	0.035573118	0.180477162
1957_52.txt	0.446666662	0.184842879	0.359968004
1958_3.txt	0.150943394	0.048951047	0.088657746
1959_151.txt	0.362811786	0.121428566	0.310933092
1961_34.txt	0.22439024	0.080495353	0.152968825
1962_303.txt	0.271999995	0.063559318	0.211636105
1963_170.txt	0.185897432	0.022641506	0.115223029
1964_144.txt	0.476470583	0.287145237	0.40562979
1965_111.txt	0.232432427	0.04545454	0.209589604
1966_154.txt	0.156862741	0.061855666	0.111935966
1966_236.txt	0.315789469	0.068702285	0.233329844
1967_267.txt	0.360493822	0.188998585	0.325921952
1968_197.txt	0.260240959	0.080519476	0.193328482
1969_324.txt	0.114754094	0.011173181	0.072964722

1969_57.txt	0.263852238	0.122448975	0.19930764
1971_111.txt	0.358823525	0.06677265	0.229947211
1971_138.txt	0.225563905	0.055393581	0.200477779
1971_336.txt	0.180904519	0.045454542	0.113552667
1971_49.txt	0.292682922	0.107594932	0.223365955
1972_11.txt	0.216560506	0.042833606	0.111960986
1972_291.txt	0.278481008	0.121807461	0.207304357
1972_31.txt	0.352574098	0.090909086	0.30117996
1972_62.txt	0.219066933	0.024498883	0.121837556
1973_186.txt	0.263374481	0.069825432	0.16125092
1976_176.txt	0.366412209	0.128146448	0.293889291
1976_200.txt	0.217142853	0.083333329	0.12341543
1976_43.txt	0.295302009	0.097323596	0.229882616
1979_104.txt	0.253443522	0.08841463	0.169293223
1979_110.txt	0.352941172	0.137203162	0.268703641
1979_158.txt	0.321116923	0.113999995	0.241621927
1979_33.txt	0.181638694	0.046041546	0.113569495
1980_221.txt	0.082687337	0.008415146	0.04299268
1980_39.txt	0.20359281	0.04291845	0.165696993
1980_91.txt	0.281786937	0.062360798	0.204296066
1981_49.txt	0.142857138	0.026402636	0.11014662
1982_28.txt	0.20833333	0.044673536	0.124652667
1983_129.txt	0.187713307	0.069094301	0.118908432
1983_27.txt	0.180952377	0.031152645	0.114151332
1983_37.txt	0.174242421	0.029850744	0.106207099

1984_115.txt	0.274999996	0.12327311	0.172765986
1984_118.txt	0.213171573	0.060682677	0.135555478
1985_113.txt	0.267657988	0.060324821	0.196534488
1985_114.txt	0.341880337	0.071186436	0.277580316
1986_218.txt	0.201652888	0.027331186	0.137986659
1987_154.txt	0.168067222	0.010178113	0.102944552
1987_189.txt	0.219653175	0.024896261	0.162640621
1987_315.txt	0.272222218	0.063492059	0.192660213
1987_37.txt	0.253968249	0.059701488	0.207488374
1988_88.txt	0.236363633	0.061971828	0.160749219
1989_233.txt	0.13333333	0.02158273	0.094571988
1990_171.txt	0.321167879	0.103004287	0.22567288
1990_96.txt	0.223880592	0.108108103	0.192821592
1991_12.txt	0.197309413	0.040816322	0.137420982
1991_48.txt	0.224637676	0.085393254	0.202462355
1992_144.txt	0.138461536	0.045627375	0.073529704
1992_182.txt	0.186666662	0.031249996	0.159282677
1992_47.txt	0.235294113	0.118749995	0.222059238
1992_76.txt	0.228070171	0.058139531	0.1721042
Average F	0.244831507	0.072819652	0.180276309