

Calculate Relevance Scores using LRP

and normalize them into 10 groups

```
[0.09092003 0.09092758 0.09726554 0.098958
                                              0.07441638 0.09825495
 0.07246995 0.09902801 0.06150808 0.040598
                                              0.03991811 0.08893584
 0.06015343 0.05149979 0.03626976 0.07084256 0.0274086 0.09942452
 0.07176907 \ 0.07399616 \ 0.0692706 \ 0.05400774 \ 0.0488514 \ 0.06436172
 0.03110852 0.03082936 0.06094697 0.06514976 0.00614182 0.00863441
 0.05848748 \ 0.06088433 \ 0.0686549 \ \ 0.06849285 \ 0.03755682 \ 0.03056686
 0.03047691 0.03727353 0.08879419 0.06649591 0.09582251 0.08418636
 0.09368388 0.0979825 0.09117502 0.00838251 0.07987029 0.05576391
 0.0820665 0.0703794 0.08018108 0.08558982]
Contribution of pixels in the range [ 0.0 0.1] is:
                                                     52
[0.19994847 0.19983687 0.19854215 ...
                                       0.19229233 0.18978593
                                                             0.19832114]
                                      0.1 0.2] is:
Contribution of pixels in the range [
                                                     6561
[0.20817375 0.20934746 0.20818148
                                       0.2071517
                                                  0.20684499 0.200522541
                                  . . .
Contribution of pixels in the range [ 0.2 0.3 ] is:
                                                       143650
[0.30972122 0.33181238 0.30474263 0.35068233 0.30116078 0.34267655
 0.33317711 0.33778899 0.30371492 0.3437501
                                              0.34069087 0.31704281
 0.34530925 0.30012898 0.3552755 0.33069175 0.3030143
                                                         0.34146781
 0.32786996 0.32964289 0.31136079 0.30039834 0.30106356 0.30855136
 0.3005875 \quad 0.3375644 \quad 0.33783553 \quad 0.30353407 \quad 0.31641788 \quad 0.30585407
 0.3040984
            0.30454061 0.33359405 0.3136933 0.3188975 0.31914573
 0.31844956 0.34159807 0.30264586 0.31050037 0.33452674 0.30292176
 0.33154251 0.32608854 0.30215616 0.33966867 0.34395667 0.31710697
 0.38533004 0.30194046 0.33781456 0.3834904
                                              0.33646689 0.3877784
 0.32708726 0.37414665 0.31010653 0.30115569 0.33416255 0.30136695
 0.31286325 0.3350608 0.34466274 0.39185899 0.33245985 0.30126055
 0.39063103 0.33835913 0.37178981 0.36023246 0.30719333 0.31414311
 0.36019691 0.31457151 0.30285137 0.3419491 0.34094489 0.32758349
 0.38664157 0.33581693 0.35270762 0.31492061 0.34060077 0.32220316
 0.3686563
            0.30411659 0.34208554 0.31209493 0.32804837 0.30916331
 0.37603879 0.31253174 0.36918914 0.32879255 0.38712795 0.33157625
 0.33424891 0.3812856 0.31390273 0.32818763 0.31330505 0.34515287
 0.31853257 0.39347224 0.34432802 0.34047459 0.35177496 0.31408599
 0.3206057
            0.32527918 0.35349821 0.31055466 0.30904473 0.37026209
 0.33398702 \ 0.38154797 \ 0.3679323 \ 0.37511702 \ 0.34900515 \ 0.3813674
 0.32085803 0.31625079 0.30370132 0.34311103 0.32139102 0.37064067
            0.30459401 0.34644931 0.32337811 0.36587699 0.35682011
 0.3036227
 0.33945697 0.3487061
                       0.35905312 0.39040259 0.32514985 0.32442429
 0.30707247 0.3435079
                       0.3354666
                                  0.31124042 0.35968523 0.34707566
 0.39603121 0.3435851
                       0.3870147
                                  0.33590844 0.35311231 0.38766815
 0.31922892 0.30276653 0.32926909 0.32541909 0.31965377 0.37477243
 0.30653999 0.34015064 0.36950947 0.3853476 0.30438859 0.3567702
 0.35209978 0.37575821 0.30182475 0.30565367 0.30402225 0.35611615
 0.32992682 0.39897809 0.32943966 0.32348328 0.3102782
                                                         0.3094194
 0.36996388 0.32120545 0.39418289 0.34043508 0.32063803 0.30015223
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0.3559677 \quad 0.32084407 \quad 0.3098594 \quad 0.33392916 \quad 0.31836571 \quad 0.32303384
 0.34434729 0.31934052 0.30179226 0.32120946 0.3022425 ]
Contribution of pixels in the range [ 0.3 0.4 ] is: 191
[0.44021219 0.42044387 0.40483472 0.417555 0.47497284 0.4465443
 0.48761395 0.48400483 0.4697831 0.43499909 0.42813315 0.47335923
 0.4668964 \quad 0.47314707 \quad 0.4191242 \quad 0.42261092 \quad 0.46275951 \quad 0.45000848
 0.43560174 \ 0.48820384 \ 0.41720487 \ 0.46228163 \ 0.48493182 \ 0.4205091
 0.49241186 0.40428481 0.43706506 0.41262778 0.47367674 0.44273469
 0.40905179 0.47905154 0.45774346 0.40096053 0.47374822 0.40074293
 0.47320425 \ 0.4693835 \ 0.42298967 \ 0.45922467 \ 0.44594363 \ 0.45288762]
Contribution of pixels in the range [ 0.4 0.5 ] is: 42
[0.54416667 0.53267429 0.57644493 0.53534437 0.54970125 0.55447289
0.54236833 0.52404609 0.51234436 0.54278798 0.553352885 0.55280406]
Contribution of pixels in the range [ 0.5 0.6 ] is: 12
[0.63994231 \ 0.67755743 \ 0.\overline{64744117} \ 0.60249932 \ 0.67800409 \ 0.60977356
 0.61158446 0.60367083]
Contribution of pixels in the range [
                                         0.6 0.7 ]
[0.70648877 0.70628063 0.70118727 0.70712581 0.74827749]
Contribution of pixels in the range [
                                        0.7 0.8 ]
                                                   is :
[0.89267553 0.83797586]
Contribution of pixels in the range
                                         0.8 0.9 ]
                                                          2
[0.98472298 0.93976782 0.93908083 1.]
Contribution of pixels in the range [
                                         0.9 1.0 ] is :
Low Fear
```

## Contribution of Pixels Count in each of the 10 GROUPS

G1	Contribution of pixels in the range [ 0.0 0.1] is: 52
G2	Contribution of pixels in the range [ 0.1 0.2] is: 6561
G3	Contribution of pixels in the range [ 0.2 0.3] is: 143650
G4	Contribution of pixels in the range [ 0.3 0.4] is: 191
G5	Contribution of pixels in the range [ 0.4 0.5] is: 42
G6	Contribution of pixels in the range [ 0.5 0.6] is: 12
G7	Contribution of pixels in the range [ 0.6 0.7] is: 8
G8	Contribution of pixels in the range [ 0.7 0.8] is: 5
G9	Contribution of pixels in the range [ 0.8 0.9] is: 2
G10	Contribution of pixels in the range [ 0.9 1.0] is: 4

## Mean Calculation and Ranking Emotion

m1	m2	m3	
Mean(G1, G2,G3,G4,G5)	Mean(G3, G4,G5,G6,G7)	Mean(G6, G7,G8,G9,G10)	
m1 =	m2 =	m3 =	
MEAN(52,6561,143650,191,42)	MEAN(143650, 191, 42, 12, 8)	MEAN(12, 8, 5, 2, 4)	
m1 ≈ 30100	m2 ≈ 28781	m3 ≈ 6	
Rank mapping: [LOW, MEDIUM, HIGH]			
MEANS: [m1, m2, m3]			
Rank ← Max(m1, m2, m3)			
Rank ← Max(30100, 28781, 6)			
Rank ← (m1)			
Rank ← LOW. (mean m1 is corresponding to LOW rank)			