|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Topic | Degree  Centrality:  Rouge-1 | Degree  Centrality:  Rouge-2 | Degree  Centrality:  Rouge-L | TextRank:  Rouge-1 | TextRank:  Rouge-2 | TextRank:  Rouge-L |
| Topic 1 | 'p': 0.1925925925925926, 'r': 0.16883116883116883, 'f': 0.17993079086936234 | 'p': 0.035897435897435895, 'r': 0.03167420814479638, 'f': 0.03365384117337814 | 'p': 0.12, 'r': 0.11587982832618025, 'f': 0.11783204981725193 | 'p': 0.20408163265306123, 'r': 0.19480519480519481, 'f': 0.19933554317546176 | 'p': 0.03389830508474576, 'r': 0.027149321266968326, 'f': 0.030150748829954596 | 'p': 0.1134020618556701, 'r': 0.0944206008583691, 'f': 0.10136726386951243 |
| Topic 2 | 'p': 0.12345679012345678, 'r': 0.0847457627118644, 'f': 0.10050250773566347 | 'p': 0.01098901098901099, 'r': 0.006535947712418301, 'f': 0.008196716634307962 | 'p': 0.13043478260869565, 'r': 0.07741935483870968, 'f': 0.08658801664740973 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 | 'p': 0.0, 'r': 0.0, 'f': 0.0 | 'rouge-l': {'p': 0.05714285714285714, 'r': 0.025806451612903226, 'f': 0.02844936222539041 |
| Topic 3 | 'p': 0.9285714285714286, 'r': 0.7959183673469388, 'f': 0.8571428521724431 | 'p': 0.8994082840236687, 'r': 0.7487684729064039, 'f': 0.8172042961170366 | 'p': 0.9513513513513514, 'r': 0.8, 'f': 0.8564382311149231 | 'p': 0.9285714285714286, 'r': 0.7959183673469388, 'f': 0.8571428521724431 | 'p': 0.8994082840236687, 'r': 0.7487684729064039, 'f': 0.8172042961170366 | 'rouge-l': {'p': 0.9513513513513514, 'r': 0.8, 'f': 0.8564382311149231 |
| Topic 4 | 'p': 0.13533834586466165, 'r': 0.20689655172413793, 'f': 0.16363635885495884 | 'p': 0.018867924528301886, 'r': 0.025210084033613446, 'f': 0.02158272891646506 | 'p': 0.10975609756097561, 'r': 0.144, 'f': 0.12026550937704669 | 'p': 0.21518987341772153, 'r': 0.19540229885057472, 'f': 0.20481927212004658 | 'p': 0.03333333333333333, 'r': 0.025210084033613446, 'f': 0.028708129067558815 | 'p': 0.16129032258064516, 'r': 0.12, 'f': 0.1320443796186183 |
| Topic 5 | 'p': 0.21487603305785125, 'r': 0.15853658536585366, 'f': 0.182456135464697 | 'p': 0.02112676056338028, 'r': 0.013761467889908258, 'f': 0.01666666188950754 | 'p': 0.125, 'r': 0.08144796380090498, 'f': 0.0908853474040651 | 'rouge-l': {'p': 0.05714285714285714, 'r': 0.025806451612903226, 'f': 0.02844936222539041 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 | 'p': 0.03389830508474576, 'r': 0.027149321266968326, 'f': 0.030150748829954596 |

**Table 1: Threshold = 0.1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Topic | Degree  Centrality:  Rouge-1 | Degree  Centrality:  Rouge-2 | Degree  Centrality:  Rouge-L | TextRank:  Rouge-1 | TextRank:  Rouge-2 | TextRank:  Rouge-L |
| Topic 1 | 'p': 0.13983050847457626, 'r': 0.21428571428571427, 'f': 0.16923076445180815 | 'p': 0.02203856749311295, 'r': 0.03619909502262444, 'f': 0.027397255569584687 | 'p': 0.08941176470588236, 'r': 0.1630901287553648, 'f': 0.0998348799828735 | 'p': 0.1949685534591195, 'r': 0.2012987012987013, 'f': 0.19808306209392781 | 'p': 0.030612244897959183, 'r': 0.027149321266968326, 'f': 0.02877697343523828 | 'p': 0.08616187989556136, 'r': 0.14163090128755365, 'f': 0.096355601637328 |
| Topic 2 | 'p': 0.10576923076923077, 'r': 0.09322033898305085, 'f': 0.09909909411898411 | 'p': 0.0, 'r': 0.0, 'f': 0.0 | 'p': 0.075, 'r': 0.05806451612903226, 'f': 0.06343230539929855 | 'p': 0.0425531914893617, 'r': 0.01694915254237288, 'f': 0.024242420168228414 | 'p': 0.0, 'r': 0.0, 'f': 0.0 | 'p': 0.01818181818181818, 'r': 0.0064516129032258064, 'f': 0.006953280637593939 |
| Topic 3 | 'p': 0.8013698630136986, 'r': 0.7959183673469388, 'f': 0.7986348072867477 | 'p': 0.7794871794871795, 'r': 0.7487684729064039, 'f': 0.7638190904794071 | 'p': 0.8301886792452831, 'r': 0.8, 'f': 0.8142565312824483 | 'p': 0.9285714285714286, 'r': 0.7959183673469388, 'f': 0.8571428521724431 | 'p': 0.8994082840236687, 'r': 0.7487684729064039, 'f': 0.8172042961170366 | 'p': 0.9513513513513514, 'r': 0.8, 'f': 0.8564382311149231 |
| Topic 4 | 'p': 0.1323529411764706, 'r': 0.20689655172413793, 'f': 0.16143497281988392 | 'p': 0.018404907975460124, 'r': 0.025210084033613446, 'f': 0.021276590866406233 | 'p': 0.10404624277456648, 'r': 0.144, 'f': 0.11498950614739165 | 'p': 0.1949685534591195, 'r': 0.2012987012987013, 'f': 0.19808306209392781 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 | 'p': 0.03389830508474576, 'r': 0.027149321266968326, 'f': 0.030150748829954596 |
| Topic 5 | 'p': 0.16470588235294117, 'r': 0.17073170731707318, 'f': 0.16766466566029634 | 'p': 0.014925373134328358, 'r': 0.013761467889908258, 'f': 0.014319804077444907 | 'p': 0.08661417322834646, 'r': 0.09954751131221719, 'f': 0.0917501519901624 | 'p': 0.008771929824561403, 'r': 0.006535947712418301, 'f': 0.007490631810801496 | 'p': 0.9285714285714286, 'r': 0.7959183673469388, 'f': 0.8571428521724431 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 |

**Table 2: Threshold = 0.2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Topic | Degree  Centrality:  Rouge-1 | Degree  Centrality:  Rouge-2 | Degree  Centrality:  Rouge-L | TextRank:  Rouge-1 | TextRank:  Rouge-2 | TextRank:  Rouge-L |
| Topic 1 | 'p': 0.18888888888888888, 'r': 0.11038961038961038, 'f': 0.13934425763907568 | 'p': 0.015384615384615385, 'r': 0.00904977375565611, 'f': 0.011396006732090121 | 'p': 0.15789473684210525, 'r': 0.09012875536480687, 'f': 0.10075594051825133 | 'p': 0.14960629921259844, 'r': 0.24675324675324675, 'f': 0.18627450510428695 | 'p': 0.022408963585434174, 'r': 0.03619909502262444, 'f': 0.027681656176471395 | 'p': 0.07368421052631578, 'r': 0.18025751072961374, 'f': 0.0804981291739558 |
| Topic 2 | 'p': 0.0707070707070707, 'r': 0.059322033898305086, 'f': 0.06451612407059013 | 'p': 0.008771929824561403, 'r': 0.006535947712418301, 'f': 0.007490631810801496 | 'rouge-l': {'p': 0.05172413793103448, 'r': 0.03870967741935484, 'f': 0.04255359409121487 | 'p': 0.0707070707070707, 'r': 0.059322033898305086, 'f': 0.06451612407059013 | 'p': 0.008771929824561403, 'r': 0.006535947712418301, 'f': 0.007490631810801496 | 'p': 0.05172413793103448, 'r': 0.03870967741935484, 'f': 0.04255359409121487 |
| Topic 3 | 'p': 0.7959183673469388, 'r': 0.7959183673469388, 'f': 0.7959183623469388 | 'p': 0.7715736040609137, 'r': 0.7487684729064039, 'f': 0.759999995001125 | 'p': 0.4595959595959596, 'r': 0.8272727272727273, 'f': 0.5134128166908645 | 'p': 0.9285714285714286, 'r': 0.7959183673469388, 'f': 0.8571428521724431 | 'p': 0.8994082840236687, 'r': 0.7487684729064039, 'f': 0.8172042961170366 | 'p': 0.9513513513513514, 'r': 0.8, 'f': 0.8564382311149231 |
| Topic 4 | 'p': 0.10795454545454546, 'r': 0.21839080459770116, 'f': 0.14448668758779237 | 'p': 0.017543859649122806, 'r': 0.03361344537815126, 'f': 0.023054750536588675 | 'p': 0.08284023668639054, 'r': 0.224, 'f': 0.08963636667910613 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 | 'p': 0.21518987341772153, 'r': 0.19540229885057472, 'f': 0.20481927212004658 | 'p': 0.08196721311475409, 'r': 0.0423728813559322, 'f': 0.0558659172947165 |
| Topic 5 | 'p': 0.16363636363636364, 'r': 0.10975609756097561, 'f': 0.131386856508072 | 'p': 0.02459016393442623, 'r': 0.013761467889908258, 'f': 0.01764705422214653 | 'p': 0.06716417910447761, 'r': 0.04072398190045249, 'f': 0.04554352985025824 | 'p': 0.03389830508474576, 'r': 0.027149321266968326, 'f': 0.030150748829954596 | 'p': 0.008771929824561403, 'r': 0.006535947712418301, 'f': 0.007490631810801496 | 'p': 0.0425531914893617, 'r': 0.01694915254237288, 'f': 0.024242420168228414 |

**Table 3: Threshold = 0.3**