**Z534 Search – Assignment 2**

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**Short Query:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Evaluation Metric** | **Your Algorithm** | **Vector Space Model** | **BM25** | **Language Model with Dirichlet Smoothing** | **Language Model with Jelinek Mercer Smoothing** |
| **R-prec** | 0.1500 | 0.1978 | 0.2117 | 0.2198 | 0.2047 |
| **recip\_rank** | 0.3828 | 0.2182 | 0.4664 | 0.4798 | 0.4290 |
| **P@5** | 0.2531 | 0.2939 | 0.3020 | 0.3388 | 0.2735 |
| **P@10** | 0.2102 | 0.2980 | 0.2959 | 0.3245 | 0.2816 |
| **P@100** | 0.1284 | 0.1665 | 0.1698 | 0.1708 | 0.1627 |
| **MAP@5** | 0.0252 | 0.0402 | 0.0404 | 0.0460 | 0.0411 |
| **MAP@10** | 0.0336 | 0.0610 | 0.0612 | 0.0681 | 0.0638 |
| **MAP@100** | 0.0939 | 0.1593 | 0.1621 | 0.1682 | 0.1558 |
| **NDCG@5** | 0.2571 | 0.3066 | 0.3164 | 0.3462 | 0.2861 |
| **NDCG@10** | 0.2336 | 0.3128 | 0.3136 | 0.3409 | 0.2955 |
| **NDCG@100** | 0.2420 | 0.3205 | 0.3278 | 0.3316 | 0.3017 |

**Long Query:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Evaluation Metric** | **Your Algorithm** | **Vector Space Model** | **BM25** | **Language Model with Dirichlet Smoothing** | **Language Model with Jelinek Mercer Smoothing** |
| **R-prec** | 0.1081 | 0.1717 | 0.1882 | 0.1899 | 0.1714 |
| **recip\_rank** | 0.3055 | 0.4564 | 0.4484 | 0.3519 | 0.3635 |
| **P@5** | 0.1560 | 0.2653 | 0.2816 | 0.2612 | 0.2204 |
| **P@10** | 0.1480 | 0.2449 | 0.2429 | 0.2429 | 0.2163 |
| **P@100** | 0.0935 | 0.1414 | 0.1492 | 0.1465 | 0.1333 |
| **MAP@5** | 0.0141 | 0.0323 | 0.0329 | 0.0260 | 0.0285 |
| **MAP@10** | 0.0201 | 0.0453 | 0.0469 | 0.0413 | 0.0419 |
| **MAP@100** | 0.0492 | 0.1204 | 0.1325 | 0.1246 | 0.1134 |
| **NDCG@5** | 0.1651 | 0.2900 | 0.2999 | 0.2550 | 0.2271 |
| **NDCG@10** | 0.1600 | 0.2708 | 0.2714 | 0.2495 | 0.2299 |
| **NDCG@100** | 0.1681 | 0.2704 | 0.2861 | 0.2759 | 0.2508 |