**Precision Recall Curves:**

**Graphical user interface, application, Word

Description automatically generated**

**Query:** what similarity laws must be obeyed when constructing aeroelastic models of heated high speed aircraft.

**Relevant List:** 12 13 14 15 29 30 31 37 51 52 56 57 66 95 102 142 184 185 195 378 462 486 497 858 859 875 876 879 880 - > Length (29)

1. **Default Ranking:**

**Returned list:**

Relevant: 0051.json at index 1

Relevant: 0184.json at index 2

Relevant: 0486.json at index 3

Relevant: 0012.json at index 4

Relevant: 0013.json at index 7

Relevant: 0879.json at index 8

Relevant: 0014.json at index 16

|  |  |  |  |
| --- | --- | --- | --- |
| **Documents** | **Relevant** | **Precision@k** | **Recall@k** |
| **1** | **Yes** | **1** | **0.034** |
| **2** | **Yes** | **1** | **0.068** |
| **3** | **Yes** | **1** | **0.103** |
| **4** | **Yes** | **1** | **0.137** |
| **5** | **No** | **0.8** | **0.137** |
| **6** | **No** | **0.666** | **0.137** |
| **7** | **Yes** | **0.714** | **0.172** |
| **8** | **Yes** | **0.75** | **0.206** |
| **9** | **No** | **0.666** | **0.206** |
| **10** | **No** | **0.6** | **0.206** |
| **11** | **No** | **0.545** | **0.206** |
| **12** | **No** | **0.5** | **0.206** |
| **13** | **No** | **0.461** | **0.206** |
| **14** | **No** | **0.428** | **0.206** |
| **15** | **No** | **0.4** | **0.206** |
| **16** | **Yes** | **0.43** | **0.241** |
| **17** | **No** | **0.411** | **0.241** |
| **18** | **No** | **0.388** | **0.241** |
| **19** | **No** | **0.368** | **0.241** |
| **20** | **No** | **0.35** | **0.241** |

**Precision - Recall Curve**

**Chart, letter

Description automatically generated**

1. **Traditional Ranking:**

**Returned list:**

Relevant: 0051.json at index 1

Relevant: 0486.json at index 2

Relevant: 0184.json at index 3

Relevant: 0012.json at index 4

Relevant: 0013.json at index 8

Relevant: 0056.json at index 9

Relevant: 0879.json at index 13

Relevant: 0014.json at index 16

|  |  |  |  |
| --- | --- | --- | --- |
| **Documents** | **Relevant** | **Precision@k** | **Recall@k** |
| **1** | **Yes** | **1** | **0.034** |
| **2** | **Yes** | **1** | **0.068** |
| **3** | **Yes** | **1** | **0.103** |
| **4** | **Yes** | **1** | **0.137** |
| **5** | **No** | **0.8** | **0.137** |
| **6** | **No** | **0.666** | **0.137** |
| **7** | **No** | **0.571** | **0.137** |
| **8** | **Yes** | **0.625** | **0.172** |
| **9** | **Yes** | **0.666** | **0.206** |
| **10** | **No** | **0.6** | **0.206** |
| **11** | **No** | **0.545** | **0.206** |
| **12** | **No** | **0.5** | **0.206** |
| **13** | **Yes** | **0.538** | **0.241** |
| **14** | **No** | **0.5** | **0.241** |
| **15** | **No** | **0.466** | **0.241** |
| **16** | **Yes** | **0.5** | **0.275** |
| **17** | **No** | **0.470** | **0.275** |
| **18** | **No** | **0.444** | **0.275** |
| **19** | **No** | **0.421** | **0.275** |
| **20** | **No** | **0.4** | **0.275** |

**Precision – Recall curve**

**A picture containing diagram

Description automatically generated**

1. **Okapi BM25 Ranking:**

**Returned list:**

Relevant: 0051.json at index 1

Relevant: 0184.json at index 2

Relevant: 0012.json at index 4

Relevant: 0879.json at index 5

Relevant: 0486.json at index 6

Relevant: 0875.json at index 8

Relevant: 0013.json at index 12

Relevant: 0056.json at index 15

|  |  |  |  |
| --- | --- | --- | --- |
| **Documents** | **Relevant** | **Precision@k** | **Recall@k** |
| **1** | **Yes** | **1** | **0.034** |
| **2** | **Yes** | **1** | **0.068** |
| **3** | **No** | **0.666** | **0.068** |
| **4** | **Yes** | **0.75** | **0.103** |
| **5** | **Yes** | **0.8** | **0.137** |
| **6** | **Yes** | **0.833** | **0.172** |
| **7** | **No** | **0.714** | **0.172** |
| **8** | **Yes** | **0.75** | **0.206** |
| **9** | **No** | **0.666** | **0.206** |
| **10** | **No** | **0.6** | **0.206** |
| **11** | **No** | **0.545** | **0.206** |
| **12** | **Yes** | **0.583** | **0.241** |
| **13** | **No** | **0.538** | **0.241** |
| **14** | **No** | **0.5** | **0.241** |
| **15** | **Yes** | **0.533** | **0.275** |
| **16** | **No** | **0.5** | **0.275** |
| **17** | **No** | **0.470** | **0.275** |
| **18** | **No** | **0.444** | **0.275** |
| **19** | **No** | **0.421** | **0.275** |
| **20** | **No** | **0.4** | **0.275** |

**Precision – Recall Curve**

**Chart, letter

Description automatically generated with medium confidence**

1. **Wacky Ranking:**

**Returned list:**

Relevant: 0879.json at index 1

Relevant: 0875.json at index 2

Relevant: 0184.json at index 4

Relevant: 0012.json at index 5

Relevant: 0051.json at index 9

Relevant: 0486.json at index 11

Relevant: 0880.json at index 15

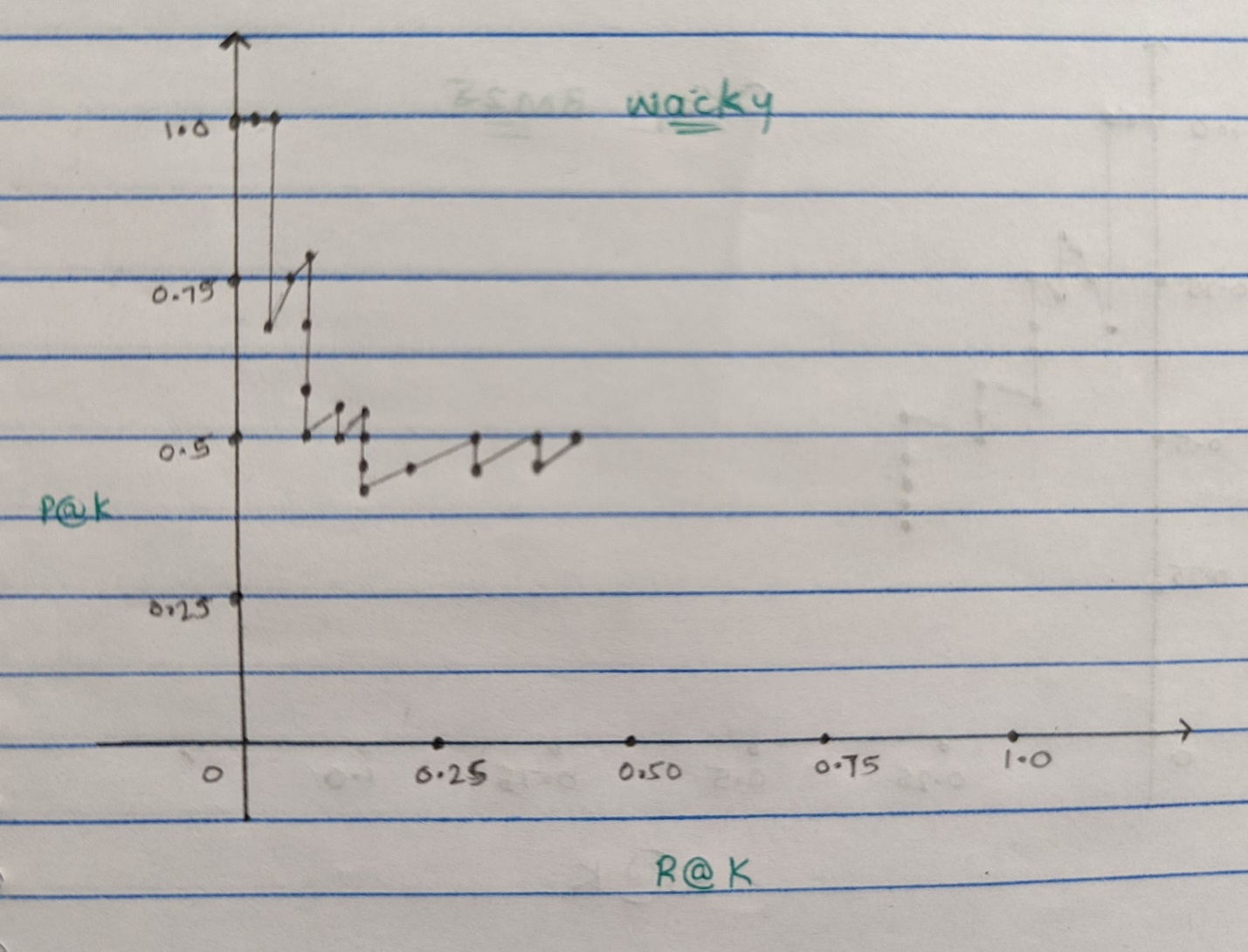
Relevant: 0013.json at index 16

Relevant: 0102.json at index 18

Relevant: 0378.json at index 20

|  |  |  |  |
| --- | --- | --- | --- |
| **Documents** | **Relevant** | **Precision@k** | **Recall@k** |
| **1** | **Yes** | **1** | **0.034** |
| **2** | **Yes** | **1** | **0.068** |
| **3** | **No** | **0.666** | **0.068** |
| **4** | **Yes** | **0.75** | **0.103** |
| **5** | **Yes** | **0.8** | **0.137** |
| **6** | **No** | **0.666** | **0.137** |
| **7** | **No** | **0.571** | **0.137** |
| **8** | **No** | **0.5** | **0.137** |
| **9** | **Yes** | **0.555** | **0.172** |
| **10** | **No** | **0.5** | **0.172** |
| **11** | **Yes** | **0.545** | **0.206** |
| **12** | **No** | **0.5** | **0.206** |
| **13** | **No** | **0.461** | **0.206** |
| **14** | **No** | **0.428** | **0.206** |
| **15** | **Yes** | **0.466** | **0.241** |
| **16** | **Yes** | **0.5** | **0.275** |
| **17** | **No** | **0.470** | **0.275** |
| **18** | **Yes** | **0.5** | **0.310** |
| **19** | **No** | **0.473** | **0.310** |
| **20** | **Yes** | **0.5** | **0.344** |

**Precision – Recall Curve**

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