DBPEDIA-ENTITY V2: A TEST COLLECTION FOR ENTITY SEARCH

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DBpedia + Entity search → DBpedia-Entity collection

SUMMARY

• DBpedia-entity v1* has been used as a standard test collection for entity search

• DBpedia-entity v2 is the updated version
  - Based on a recent DBpedia dump (2015-10, with 6.2M entities)
  - Graded relevance judgments and explicit non-relevant judgments for all queries

• Consistent in collecting relevance judgments (vs. heterogeneous judgments in v1)
  - Results pooled from baselines, state-of-the-art retrieval methods, and old qrels
  - Collecting judgments using crowd workers as well as expert annotators

• What’s next? Show that your model can outperform existing approaches
  - According to our results, recent models can hardly beat traditional baselines

QUERYs AND RESULTS

<table>
<thead>
<tr>
<th>Query Categories</th>
<th>#queries</th>
<th>Method</th>
<th>v1</th>
<th>v2</th>
<th>v2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SemSearch ES</td>
<td>113</td>
<td>BM25</td>
<td>0.0884, 0.0971</td>
<td>0.1893, 0.3582</td>
<td></td>
</tr>
<tr>
<td>named entity queries; e.g., “brooklyn bridge”</td>
<td></td>
<td>LM</td>
<td>0.1709, 0.1837</td>
<td>0.3144, 0.4182</td>
<td></td>
</tr>
<tr>
<td>INEX-LD</td>
<td>99</td>
<td>SDM</td>
<td>0.1860, 0.1880, 0.3259</td>
<td>0.4185</td>
<td></td>
</tr>
<tr>
<td>keyword queries; e.g., “electronic music genres”</td>
<td></td>
<td>LTR</td>
<td>0.1723, 0.1831</td>
<td>0.2446, 0.3464</td>
<td></td>
</tr>
<tr>
<td>ListSearch</td>
<td>115</td>
<td>BM25-CA</td>
<td>0.2067, 0.2056</td>
<td>0.3265, 0.4231</td>
<td></td>
</tr>
<tr>
<td>list queries; e.g., “professional sports teams in Philadelphia”</td>
<td></td>
<td>FSDM</td>
<td>0.2069, 0.2039</td>
<td>0.3279, 0.4267</td>
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<tr>
<td>QALD-2</td>
<td>140</td>
<td>BM25F-CA</td>
<td>0.2088, 0.2126</td>
<td>0.3361, 0.4378</td>
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<tr>
<td>natural language queries; e.g., “Who is the mayor of Berlin?”</td>
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<td>FSDM+ELR</td>
<td>0.2210, 0.2089</td>
<td>0.3295, 0.4335</td>
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<tr>
<td>Total</td>
<td>467</td>
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