Introduction
> Learning-to-Rank (LTR) framework
> Enhance iUnit ranking using feature-based approach
> Build on existing Metzler and Kanungo (MK)[5] feature set

Method
> 5 classes (BL, QSum, Sem, QT, Ctx)
> 5-fold cross validation; 20% hold-out

List of features
<table>
<thead>
<tr>
<th>Base</th>
<th>QT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OddsRatio</td>
<td>Leading5W1H</td>
</tr>
<tr>
<td>QSum[5]</td>
<td>TopRankedWikiPage</td>
</tr>
<tr>
<td>ExactMatch</td>
<td>WikipageReciporalRank</td>
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<tr>
<td>TermOverlap</td>
<td>WikipagePassage</td>
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<tr>
<td>SynonymOverlap</td>
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<td>LanguageModel</td>
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<tr>
<td>iUnitLength</td>
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<tr>
<td>Sem[7]</td>
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<tr>
<td>ESA</td>
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<tr>
<td>Word2Vec</td>
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<td>Tagme</td>
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<tr>
<td>Ctx</td>
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<tr>
<td>CollectionFrequency</td>
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<tr>
<td>AverageSentencePos</td>
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<tr>
<td>AverageDocumentRR</td>
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</tbody>
</table>

Aim
> Find extension to MK feature set
> Maximise score for ranking using LTR
> Test out features on summarisation subtask
> Check if LTR can deal with homogeneity

Results
For iUnit Ranking
- Gain/loss for BQP to baseline is greater in both direction than just BQ features

For iUnit Summarisation
- One run submitted
- BQP outperform baseline for some topic

Conclusion
For iUnit Ranking
- BQ outperforms BQP with smaller gain/loss for iUnit ranking
- Variance in gain/loss is suggestive

For iUnit Summarisation
- Only 1 submission for test using BQP
- Score may be improved by ranking according to iUnit before summarisation

References:

Discussion
For iUnit Ranking
Gain/loss for BQP to baseline is greater in both direction than just BQ features

For iUnit Summarisation
One run submitted
BQP outperform baseline for some topic

Further information
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