Co-PACRR: A Context-Aware Neural IR Model for Ad-hoc Retrieval

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Query: Jaguar SUV price.

- **Ambiguity** in local document context
  

- **Location** in global document context

- **Regularization** for different query contexts
  
<table>
<thead>
<tr>
<th>SUV</th>
<th>price</th>
<th>Jaguar</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

- Examine the local context
- Cascade relevance model
- Permute before combining

- Examine matchings w.r.t. their context

- **Employ cascade relevance model**

- **Shuffle weights on query terms before combination**

- **Re-rank search results from query likelihood on TREC Web Track 2009-2014 (average on 300 queries)**

- y-axis: improvement relative to QL

https://github.com/khui/copacrr

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