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Entity Linking

English, Spanish, Chinese

Special thanks to:
Hoa Trang Dang
Heng Ji



Monolingual Entity Linking

And talking to the Today programme's John Humphrys, Scottish MP **Michael Moore** argued that being part of the UK provides Scotland with security. "When two of our biggest banks – RBS and Bank of Scotland – collapsed, it was the strength and size of the UK economy that helped us to cope."!

Dentist **Michael Moore** of Boaz Alabama was seen last Wednesday at the home of Penelope Binkels



Cross-Language Entity Linking



他是少有的顶着明星光环的记录片导演,他不仅缔造了全美纪录 片卖座的票房神话,还在两年之内分别捧得奥斯卡最佳纪录片奖和嘎纳电影节的金棕榈大奖。成为美国乃至全世界有史以来最为 成功的纪录片作者之一。他的名字是迈克尔-摩尔!



Sample English Entity Linking Queries

2190 Queries

```
<query id="EL13_ENG_0277">  
  <docid>LTW_ENG_20091010.0098</docid>  
  <name>UCLA</name>  
  <beg>612</beg>  
  <end>615</end>  
</query>
```



```
<query id="EL13_ENG_1207">  
  <docid>AFP_ENG_20100325.0138</docid>  
  <name>Taylor Phinney</name>  
  <beg>107</beg>  
  <end>120</end>  
</query>
```

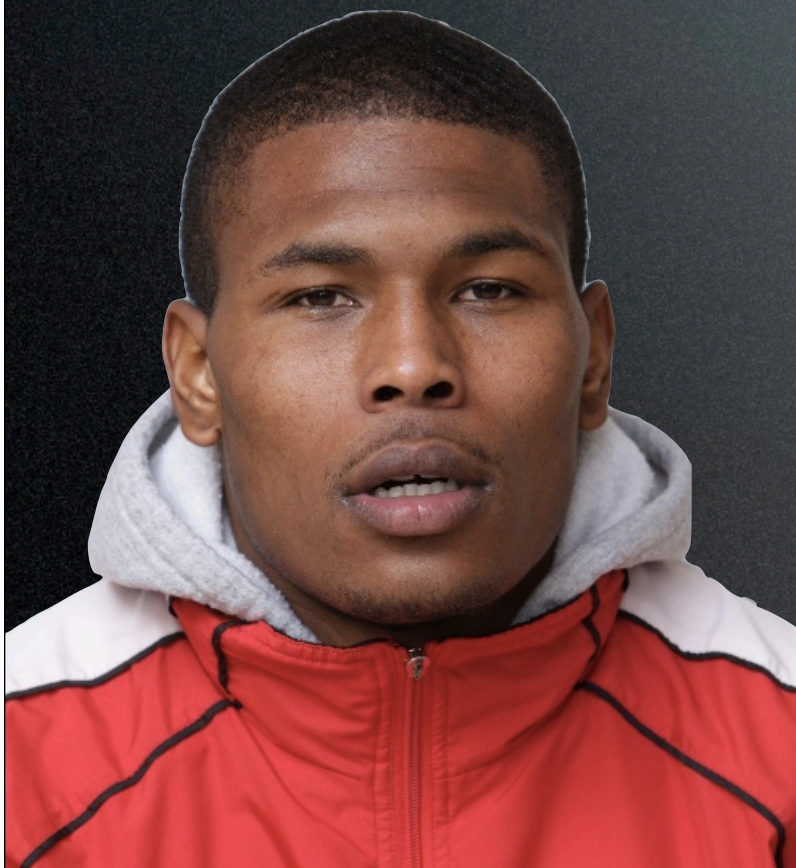
1100 NILS

1090 Linked

```
<query id="EL13_ENG_1253">  
  <docid>bolt-eng-DF-170-181137-903021</docid>  
  <name>Motor City</name>  
  <beg>113360</beg>  
  <end>113369</end>  
</query>
```



Joe Ellis



Scoring Metric: B-Cubed+

A clustering has high B-Cubed recall if, given an item, most of its coreferential items are in its cluster

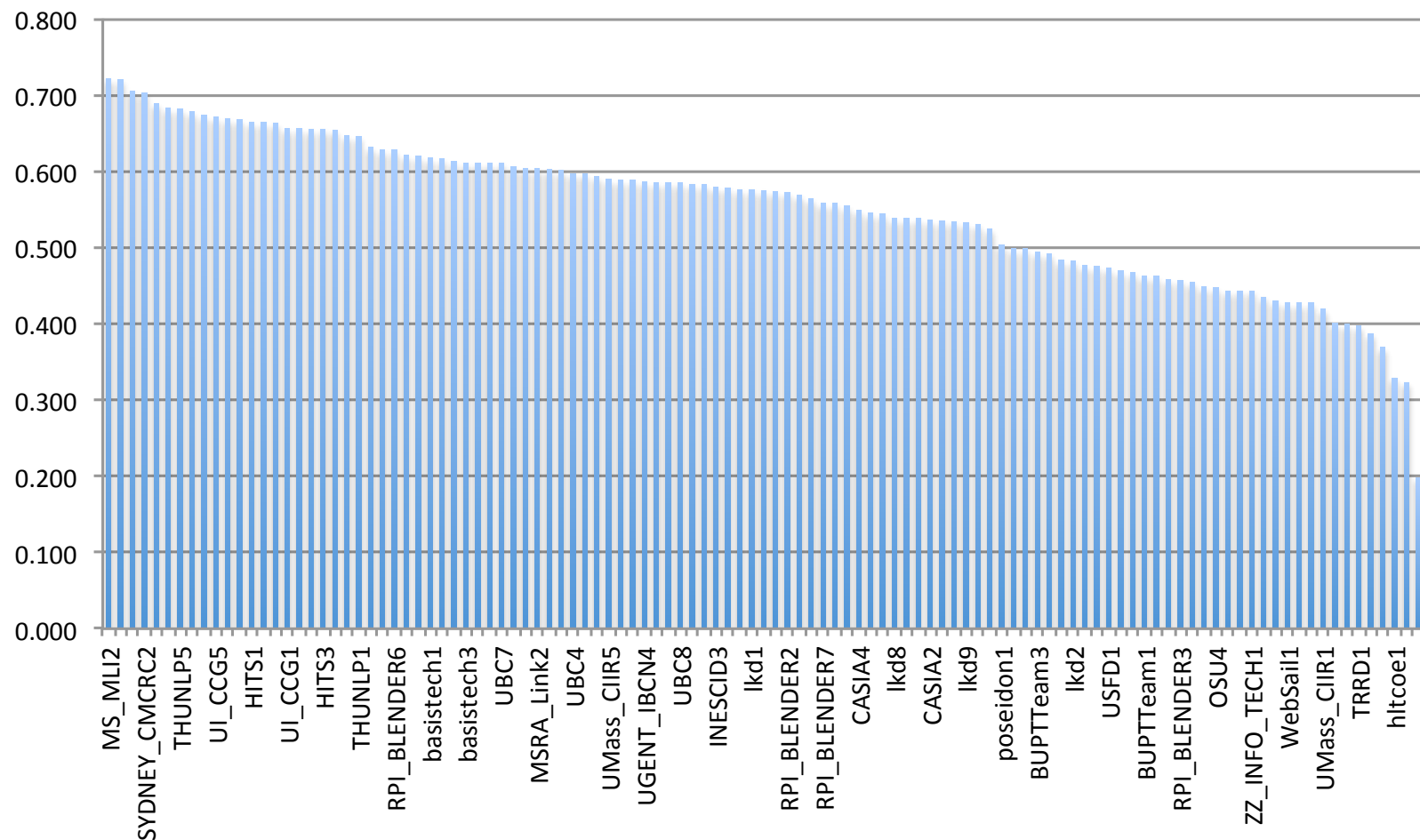
A clustering has high B-Cubed precision if, given an item, most of the other items in its cluster are in fact coreferential with it

B-Cubed+ adds the constraint that links to existing items in the KB must also match

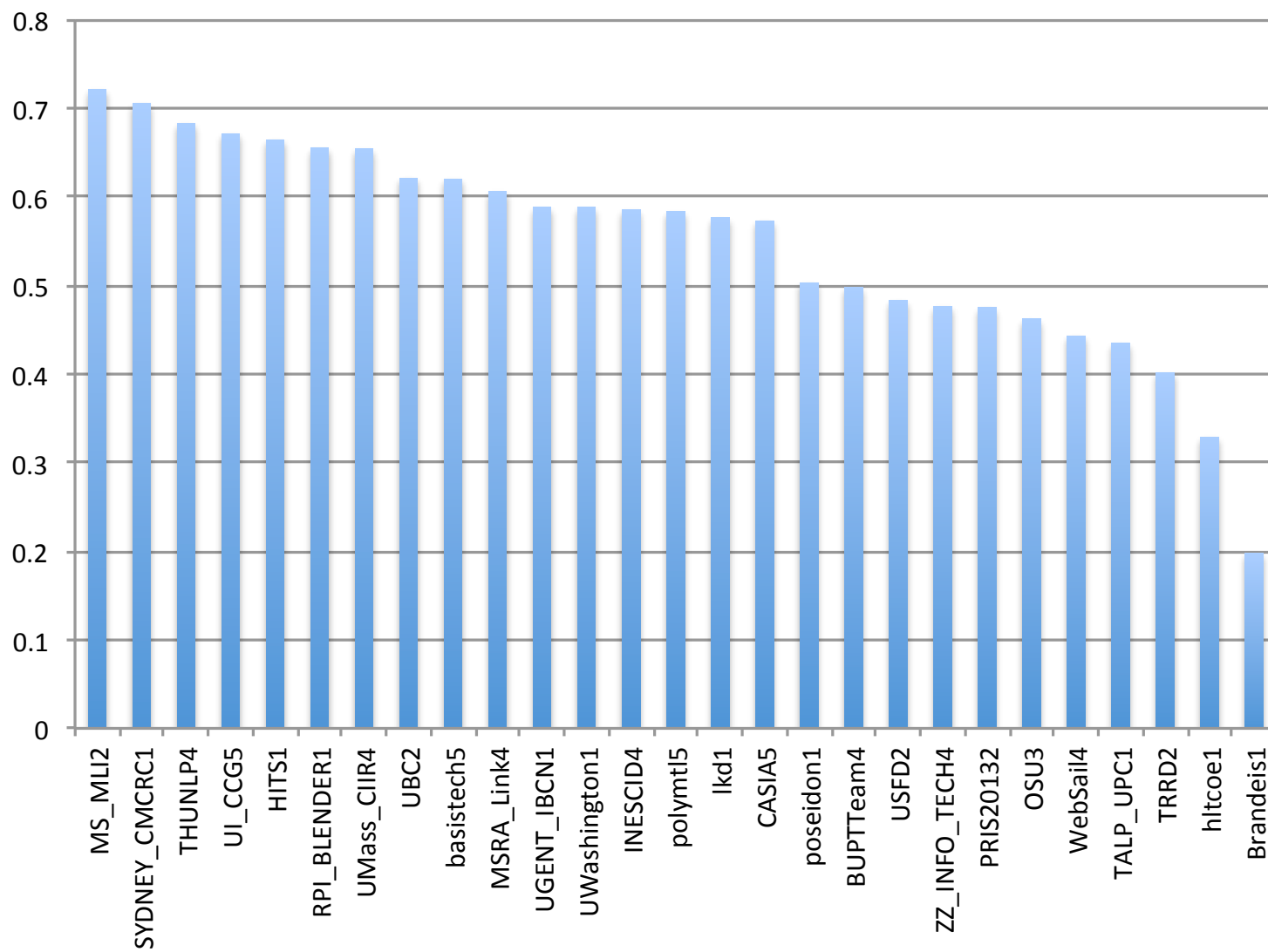


English Entity Linking Results - All Runs

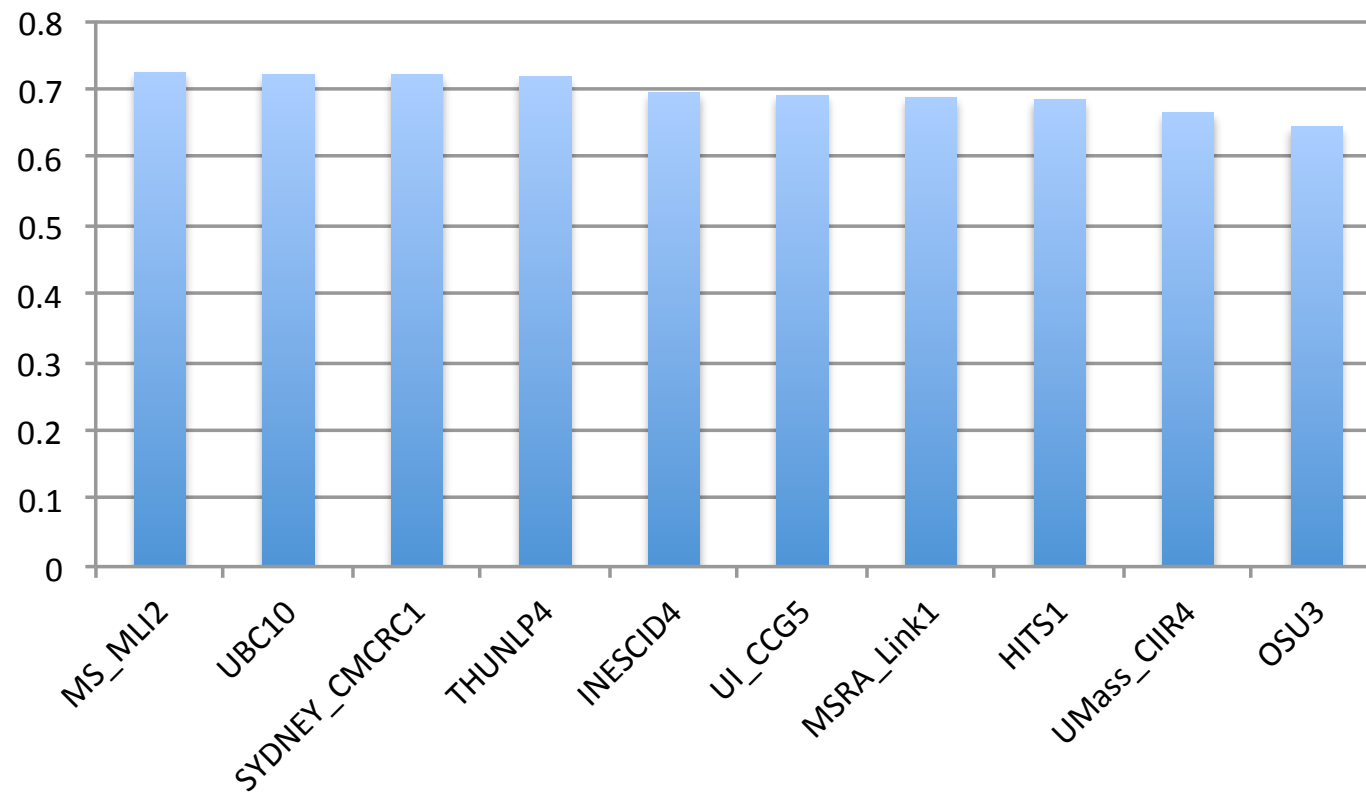
B-Cubed+ F1 (All -- 2190 queries)



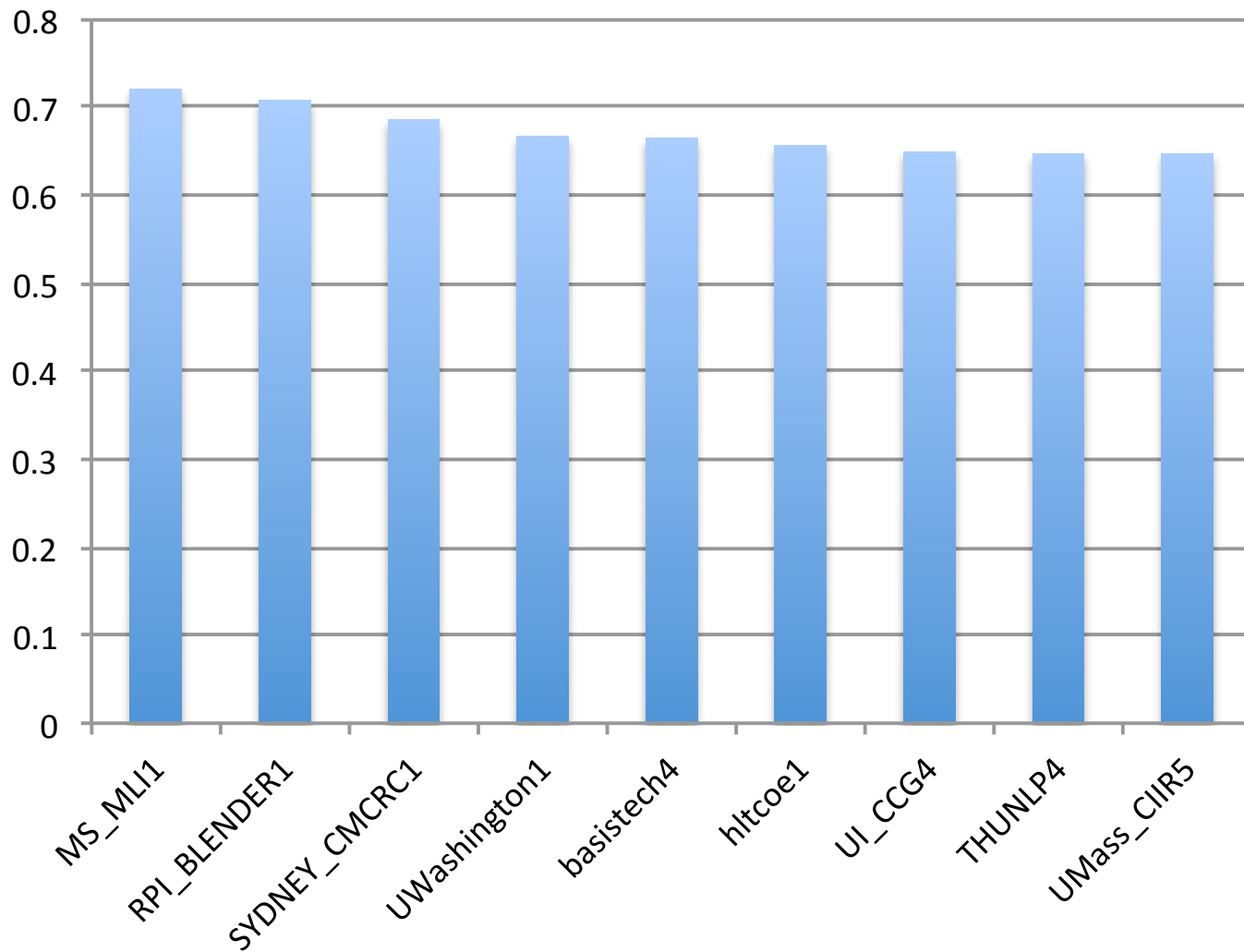
B-Cubed+ F1 All



B-Cubed+ F1 In KB

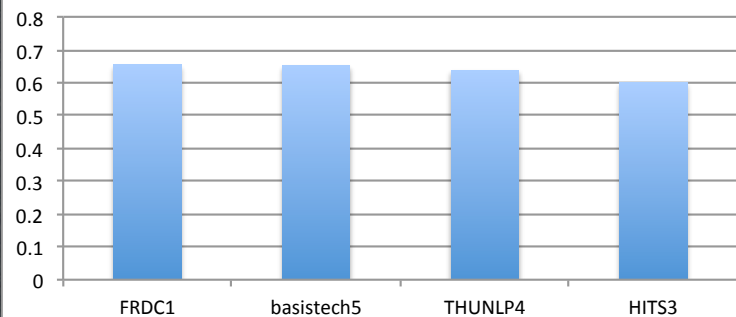


B-Cubed F1 Not In KB

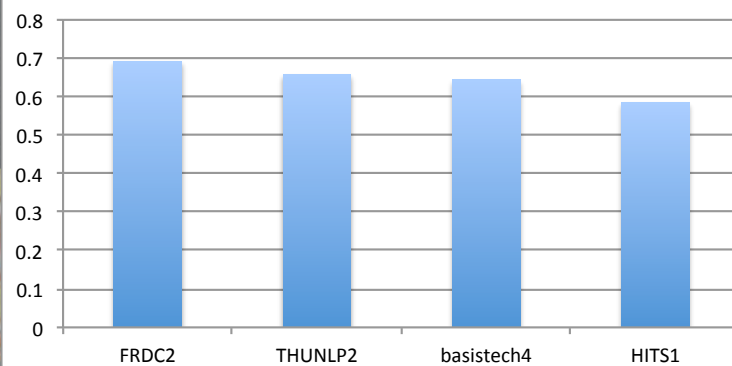


Chinese

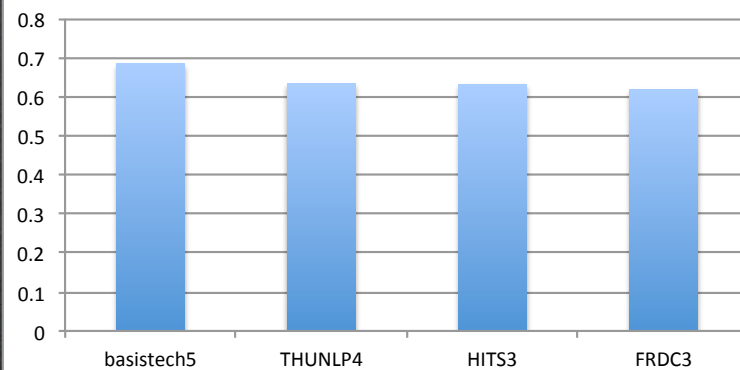
**B-Cubed+ F1
All**



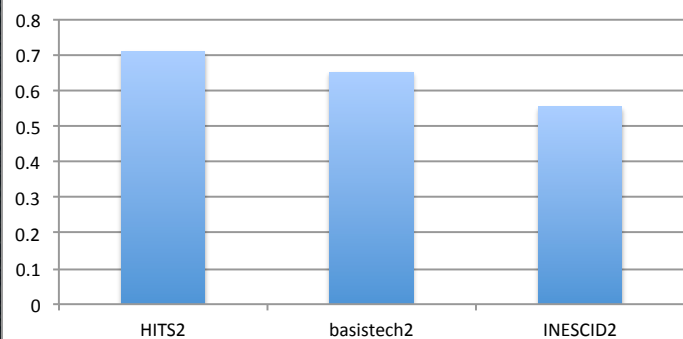
B-Cubed+ F1 In KB



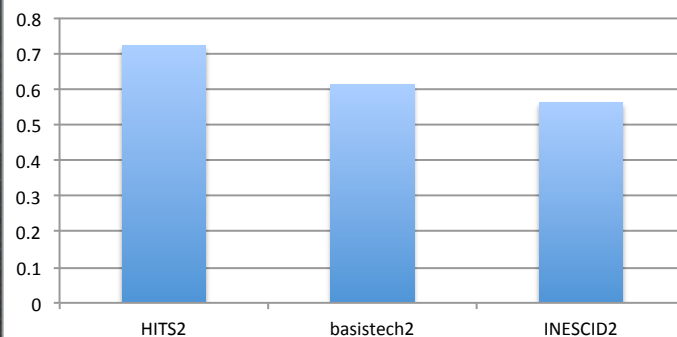
B-Cubed+ F1 Not In KB



B-Cubed+ F1 All



B-Cubed+ F1 In KB



Spanish

B-Cubed+ F1 Not In KB

