<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takehiro Yamamoto</td>
<td>Kyoto University</td>
</tr>
<tr>
<td>Yiqun Liu</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>Min Zhang</td>
<td>Tsinghua University</td>
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<tr>
<td>Zhicheng Dou</td>
<td>Renmin University of China</td>
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<tr>
<td>Ke Zhou</td>
<td>Yahoo! Labs London</td>
</tr>
<tr>
<td>Ilya Markov</td>
<td>University of Amsterdam</td>
</tr>
<tr>
<td>Makoto P. Kato</td>
<td>Kyoto University</td>
</tr>
<tr>
<td>Hiroaki Ohshima</td>
<td>Kyoto University</td>
</tr>
</tbody>
</table>
IMine

Understanding user intent behind the query
Search Result Diversification (INTENT, INTENT-2, IMine-1)
Given an ambiguous/underspecified query, produce a single result page that satisfies different user intents.
What's new in IMine-2?

- Search Result Diversificati
- Vertical Intents
Vertical Intents

iPhone 6

official

sales

review

image

Web

News

Image

Verticals
• **Query Understanding** subtask
  ▷ Subtopic Mining Subtask

• **Vertical Incorporating** subtask
  ▷ Document Ranking Subtask

More suitable to actual Web search scenarios
<table>
<thead>
<tr>
<th>Subtopic</th>
<th>Importance</th>
<th>Vertical Intent</th>
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</thead>
<tbody>
<tr>
<td>iPhone 6 Apple</td>
<td>0.95</td>
<td>Web</td>
</tr>
<tr>
<td>iPhone 6 sales</td>
<td>0.80</td>
<td>News</td>
</tr>
<tr>
<td>iPhone 6 image</td>
<td>0.73</td>
<td>Image</td>
</tr>
<tr>
<td>iPhone 6 review</td>
<td>0.65</td>
<td>Web</td>
</tr>
</tbody>
</table>

**INPUT**  
**query**

**OUTPUT**  
subtopics and their **vertical intents**
Vertical Incorporating (VI) Subtask (Chinese, English)

**INPUT** query and vertical resources

**OUTPUT** a diversified ranked list

### Vertical resources

- **Web**
  - Apple - iPhone 6
    - iPhone 6 isn't simply bigger — it's better in every way. More powerful, but remarkably power efficient. [More results from apple.com](https://www.apple.com/)
  - Apple iPhone 6 review - CNET
    - [www.cnet.com > Mobile > iPhones](https://www.cnet.com)
    - Rating: 4.5 - Review by Scott Stein - Nov 21, 2014 - The iPhone 6 is an exceptional phone. It has an average battery life: it's thin and fast with a spacious screen.
    - [This Is A Life-Changing Application That iPhone 6 Owner Should Download](https://www.businessinsider.com/best-step-counting-apps-iphone-6-2014-11)
    - 1 day ago - One of the best things about the new iPhone 6 is the new app tracker built in. This means, if you buy an iPhone 6S, you'll be able to...

- **Image**
  - Images for iPhone 6
    - [Images for iPhone 6](https://www.google.com/search?q=Images+for+iPhone+6)

- **News**
  - [This Is A Life-Changing Application That iPhone 6 Owner Should Download](https://www.businessinsider.com/best-step-counting-apps-iphone-6-2014-11)
    - Business Insider - 1 day ago
    - This means, if you buy an iPhone 5S, an iPhone 6, or an iPhone 6 Plus, you'll be able to...
    - Tech Times - 1 day ago

- **Movie**
  - [iPhone 6 and 6 Plus Drop Test! - Y](https://www.youtube.com/watch?v=djgFgEx1UkA)
    - Sep 18, 2014 - Uploaded by Recommended Cases: http://all new iphone 6 and ii

### Ranked list

1. Apple - iPhone 6
   - iPhone 6 isn't simply bigger — it's better in every way. More powerful, but remarkably power efficient. [More results from apple.com](https://www.apple.com/)

2. In the news
   - [This Is A Life-Changing Application That iPhone 6 Owner Should Download](https://www.businessinsider.com/best-step-counting-apps-iphone-6-2014-11)
     - Business Insider - 1 day ago
     - This means, if you buy an iPhone 5S, an iPhone 6, or an iPhone 6 Plus, you'll be able to...

3. Images for iPhone 6
   - [Images for iPhone 6](https://www.google.com/search?q=Images+for+iPhone+6)

4. Apple iPhone 6 review - CNET
   - [www.cnet.com > Mobile > Phones](https://www.cnet.com)
   - Rating: 4.5 - Review by Scott Stein - Nov 21, 2014 - The iPhone 6 is an exceptional phone. It has an average battery life: it's thin and fast with a spacious screen.
● **Challenges**
  – Integrate heterogeneous resources
  – Predict vertical relevance as well as topical relevance

● **Who should participate?**
  – Recent IR study
    - Diversification, Federated Search
  – NLP, ML, Web Mining, ...
  – IMine-1 participants !
● **Query Log**
  – SogouQ (Chinese)
  – Query suggestions from several Web search engines

● **Document Corpus**
  – SogouT (Chinese)
  – ClueWeb12 (English)

● **Vertical Resources**
  – Crawled results from several vertical search engines
<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
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<tbody>
<tr>
<td>Apr-May 2015</td>
<td>First CFP</td>
</tr>
<tr>
<td></td>
<td>Topics released</td>
</tr>
<tr>
<td>Jun, 2015</td>
<td>Registration due</td>
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<tr>
<td>Oct, 2015</td>
<td>Run submissions due</td>
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<tr>
<td>Feb, 2015</td>
<td>Evaluation results released</td>
</tr>
<tr>
<td>Jun, 2015</td>
<td>NTCIR-12 Conference</td>
</tr>
</tbody>
</table>
IMine-2
II
Diversification + Vertical

HP:
http://www.dl.kuis.kyoto-u.ac.jp/imine2/

Email:
ime2-organizers @ dl.kuis.kyoto-u.ac.jp
from **Topic** Understanding to **Intent** Understanding