

NTICR-12 IMine-2

Takehiro Yamamoto

Kyoto University

Yiqun Liu

Tsinghua University

Min Zhang

Tsinghua University

Zhicheng Dou

Renmin University of China

Ke Zhou

Yahoo! Labs London

Ilya Markov

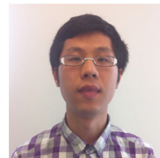
University of Amsterdam

Makoto P. Kato

Kyoto University

Hiroaki Ohshima

Kyoto University



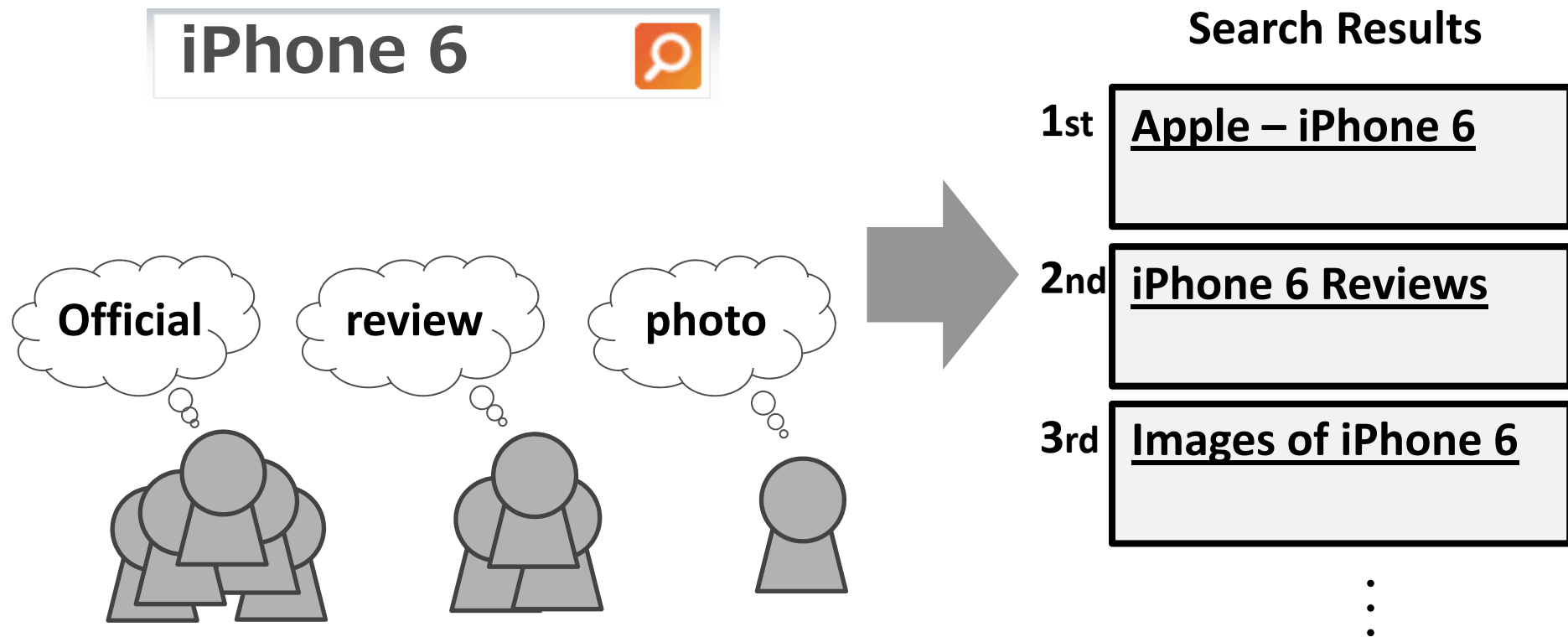
IMine II

**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



IMine-

2

||

**Search
Result
Diversificati**

+

**Vertical
Intent**

official

iPhone 6



Apple - iPhone 6

<https://www.apple.com/iphone-6/>

iPhone 6 isn't simply bigger — it's better in every way. Larger, yet dramatically thinner. More powerful, but remarkably power efficient. With a smooth metal ...

[More results from apple.com »](#)

sales

In the news



This Is A Life-Changing Application That Every iPhone 6 Owner Should Download

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 ...

iPhone 6, 6 Plus Availability And Wait Time Update: Apple Store, Verizon, Sprint, AT&T, Best Buy, RadioShack, Target

Tech Times - 1 day ago

[More news for iPhone 6](#)

review

Apple iPhone 6 review - CNET

www.cnet.com > Mobile > Phones

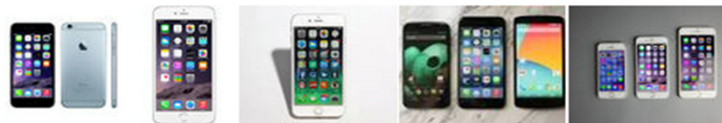
★★★★★ Rating: 4.5 - Review by Scott Stein - Nov 21, 2014 - \$199.99 to \$789.10

Nov 21, 2014 - The iPhone 6 is an exceptional phone in nearly every way except its average battery life: it's thin and fast with a spacious screen and the ...

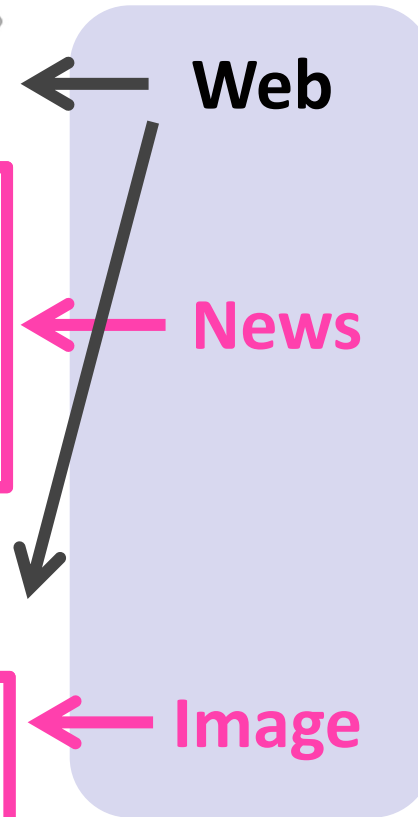
image

Images for iPhone 6

[Report images](#)



[More images for iPhone 6](#)



||
Verticals

- **Query Understanding subtask**

Subtopic Mining Subtask

- **Vertical Incorporating subtask**

Document Ranking Subtask

More suitable to actual Web search scenarios

INPUT

query

OUTPUT

subtopics and their vertical intents

iPhone 6

**Subtopic****Importance****Vertical Intent***iPhone 6 Apple**0.95**Web**iPhone 6 sales**0.80**News**iPhone 6 image**0.73**Image**iPhone 6 review**0.65**Web*

⋮

⋮

⋮

INPUT

query and vertical resources

OUTPUT

a diversified ranked list

Vertical resources

Ranked list

Web

Apple - iPhone 6
<https://www.apple.com/iphone-6/>
 iPhone 6 isn't simply bigger — it's better in every way. More powerful, but remarkably power efficient. With a spacious screen, a powerful camera, and a new design, it's the most powerful iPhone yet.
[More results from apple.com »](#)

Apple iPhone 6 review - CNET
www.cnet.com › Mobile › Phones
 ★★★★★ Rating: 4.5 - Review by Scott Stein - Nov 21, 2014 - The iPhone 6 is an exceptional phone with an average battery life: it's thin and fast with a spacious screen.

This Is A Life-Changing Application That iPhone 6 Owners Should Download
www.businessinsider.com/best-step-counting-app
 1 day ago - One of the best things about the new iPhone 6 is the new step counter built in. This means, if you buy an iPhone 5S, you'll be able to...

image

Images for iPhone 6




news

In the news
 This Is A Life-Changing Application That iPhone 6 Owner Should Download
 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...

movie

iPhone 6 and 6 Plus Drop Test! - YouTube
www.youtube.com/watch?v=...
 Sep 18, 2014 - Uploaded by...
 Recommended Cases: http://...
 the all new iPhone 6 and iPhone 6 Plus



1. **Apple - iPhone 6**
<https://www.apple.com/iphone-6/>
 iPhone 6 isn't simply bigger — it's better in every way. More powerful, but remarkably power efficient. With a spacious screen, a powerful camera, and a new design, it's the most powerful iPhone yet.
[More results from apple.com »](#)
2. **In the news**

 This Is A Life-Changing Application That iPhone 6 Owner Should Download
 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...
 iPhone 6, 6 Plus Availability And Wait Time Update: Apple Store, Verizon, Sprint, Best Buy, RadioShack, Target
 Tech Times - 1 day ago
3. **Images for iPhone 6**
4. **Apple iPhone 6 review - CNET**
www.cnet.com › Mobile › Phones
 ★★★★★ Rating: 4.5 - Review by Scott Stein - Nov 21, 2014 - The iPhone 6 is an exceptional phone with 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

Month	Event
Apr-May 2015	First CFP Topics released
Jun, 2015	Registration due
Oct, 2015	Run submissions due
Feb, 2015	Evaluation results released
Jun, 2015	NTCIR-12 Conference

IMine-2

II

Diversification + Vertical

HP:

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

Email:

imine2-organizers @ dl.kuis.kyoto-u.ac.jp

from **Topic** Understanding to **Intent** Understanding

