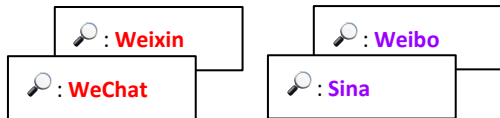


## <In-Document Search>

### Lexical Search

“Find” Function (CTRL + F)



😓 **REQ1.** Long time: multiple search over all keywords

### Regular Expression

🔍 : ^.\*(\\*BAIDU\|\\*WeChat\|\\*Weibo\|\\*Sina).\*

😓 **REQ1.** Only works for specific pattern matching

### Semantic Search

Machine Reading Comprehension

🔍 : “Which platforms are crucial for foreign companies to become familiar with when entering the Chinese market?”

😓 **REQ2.** Does not consider using external knowledge

I want to find all parts mentioning social network platforms of China.

### Input Document

BAIDU DOMINATES ONLINE Currently, there are an estimated 900 million internet users across China, ... Baidu ... inner workings of Wechat. Wechat is fundamentally a social media... in store through Weixin pay are all possible. Many local and foreign companies already successful in China have official accounts on Wechat. An official ... Weibo is another popular social media app used across China. Think of Weibo as ‘the Twitter of China’ ... an excellent way to market your company Sina by sharing the latest updates, offers, promotions etc.



### External Knowledge

#### Baidu

Article Talk

From Wikipedia, the free encyclopedia

For the medieval person, see Family of Demetrius.

Not to be confused with Baidu, Baidou, Baidou,

Baidu, Inc. (/ˈbaɪduː/ ⓘ·doo; Chinese: 百度; pinyin: bǎidù)

...

Baidu Space the social networking service of Baidu, allows registered users to create personalized homepages in a query-based searchable community.

#### WeChat

Article Talk

From Wikipedia, the free encyclopedia

Not to be confused with WeChat.

**WeChat and Weixin** (Chinese: 微信; pinyin: Wēixìn)

instant messaging, social media, and mobile payment app

...

...

...

WeChat and Weixin (Chinese: 微信; pinyin: Wēixìn (listen); lit. ‘micro-message’)[a] are a Chinese instant messaging, social media, and mobile payment app developed by Tencent.

## <Our Problem>

### Knowledge-Augmented In-Document Search

🔍 : “I want to find all parts mentioning social network platforms of China.”



**BAIDU** DOMINATES ... **Baidu** ... inner workings of **Wechat**. **Wechat** is fundamentally a social media... **Weixin** pay are all possible. official accounts on **Wechat**. ... **Weibo** is another popular social media app. Think of **Weibo** as ‘the Twitter of China’ ... market your company **Sina** ...

Single natural language query utilizing external knowledge outside the given text



**REQ1.** Find all semantic targets



**REQ2.** Utilizes external knowledge



**REQ3.** Operates in real-time