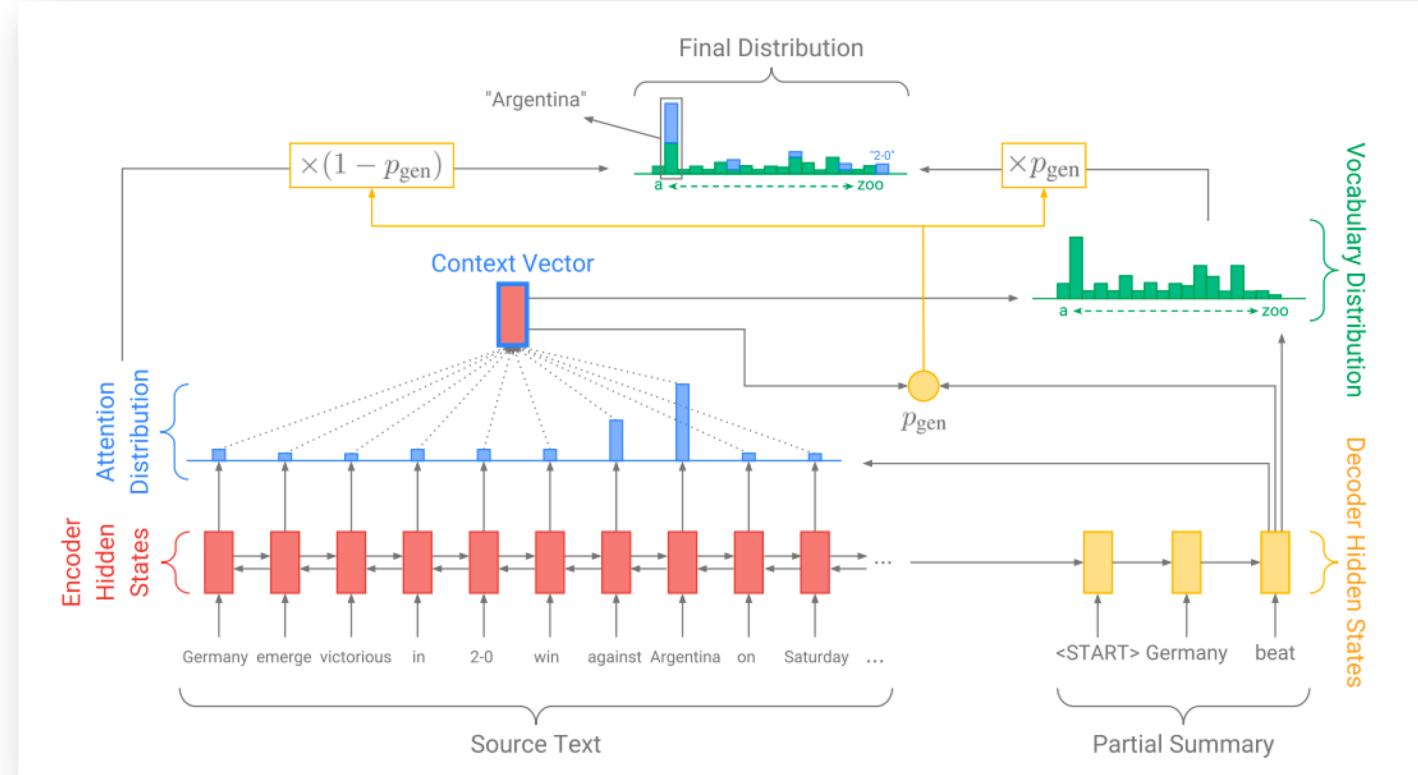


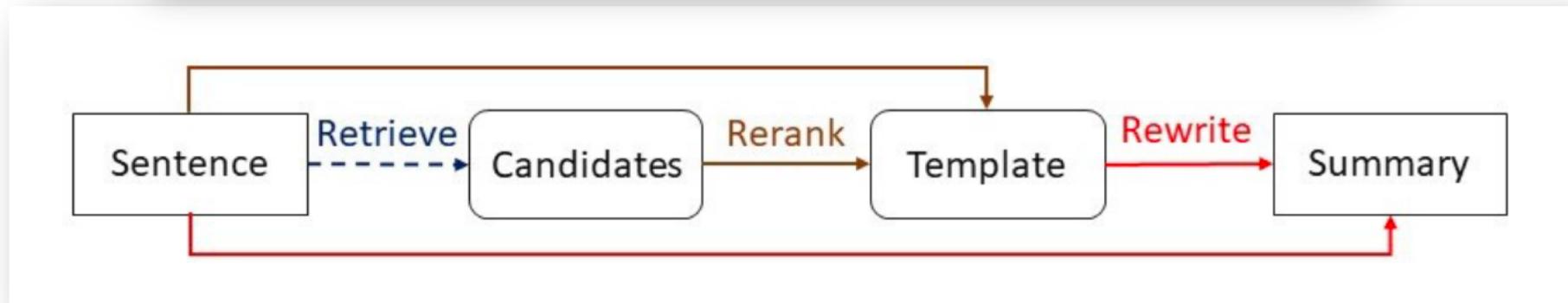
# Cloud Theme Knowledge Card/Guide Generation



NLG model



PGN:



Soft template

# Cloud Theme Knowledge Card/Guide Generation



Product embedding

Currently, items are retrieved through query cluster, keywords, question, and knowledge card;

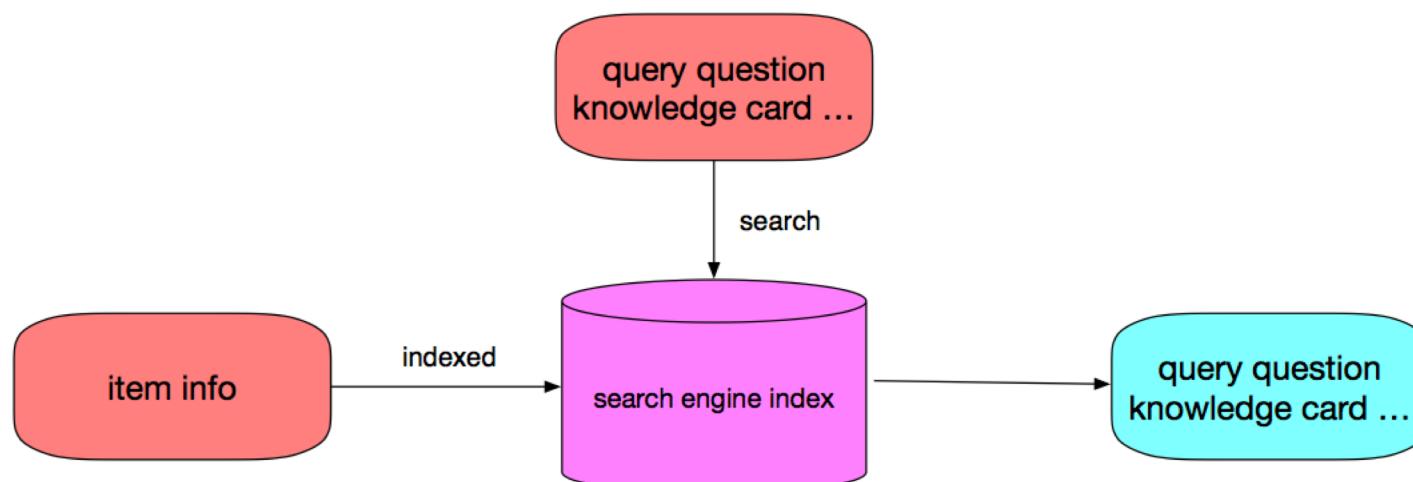
**Query cluster:** Autumn suit, female student, fresh, college style...

**Keywords:** campus, in the Mood for Love, golden years

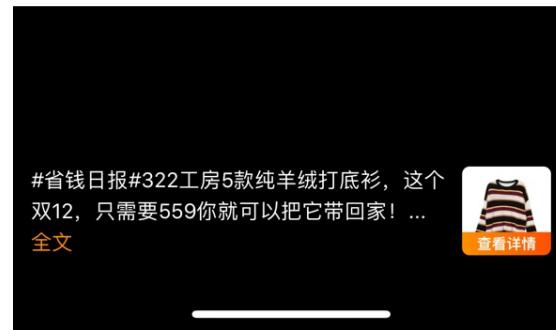
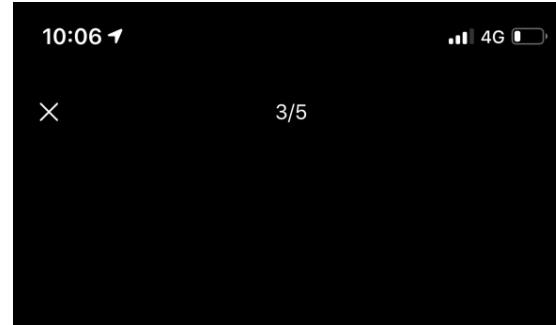
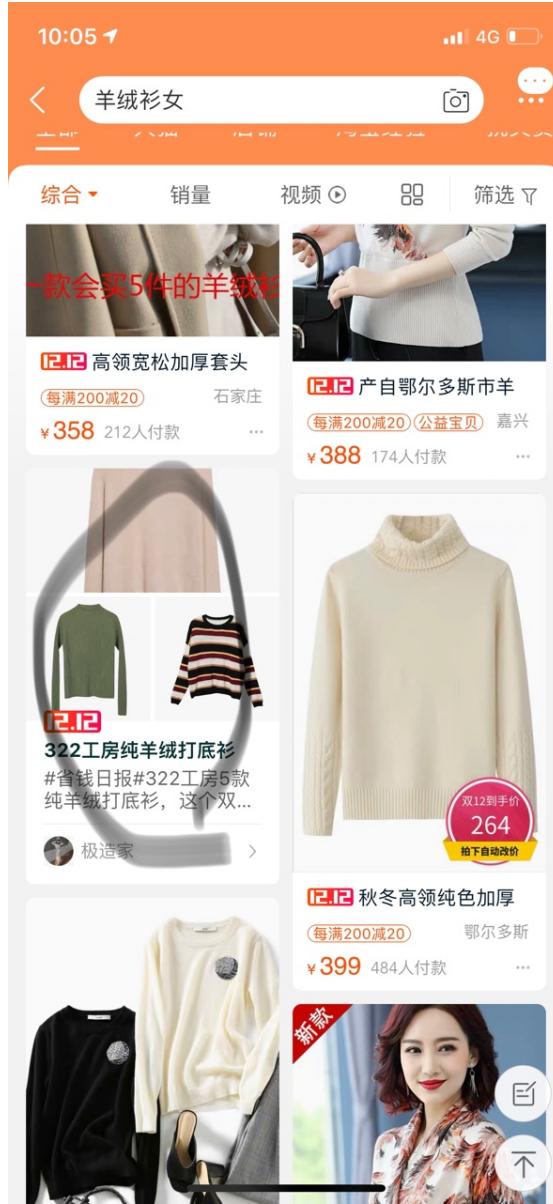
**Question:** Do you know the style of female students?

**Knowledge card:** We are at the border of immaturity and maturity.

If we want to be a campus goddess, of course we have to choose what suits us. To become a dazzling scenery, we should live the most beautiful look. Come to the small society of university...



# Cloud Theme Knowledge Card/Guide Generation



322工房纯羊绒打底衫 只需559元!

313阅读

#省钱日报#322工房5款纯羊绒打底衫, 这个双12, 只需要559你就可以把它带回家!



【322工房纯羊绒黑白条纹针织衫】

经典的黑白条纹毛衣, 可内搭可单穿, 轻轻松松穿秋冬春三个季节! 十年陪着你都不会过时!

原价799元 双12特价599元 满减到手价559元



## Part 6 : What is next?

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# Current Focus and Challenges

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- Recommendation pipeline for Alibaba: billions of users and products with over trillions of edges and extremely rich attributes
  - Algorithm + System Co-optimization
- Graph embedding & inference for attributed heterogeneous network
  - ✓ Heterogeneous nodes with attributes
  - ✓ Different types of edges, easy to integrate knowledge (Knowledge Graph and Graph Embedding)
  - ✓ For each specific task, best choice of edge type & node attributes
- Multi-modality & Scalable Bayesian Deep Learning
- Introducing high quality data labels
  - ✓ High quality side information, such as high valuable users and merchandise
  - ✓ Targeted positive and negative samples, node & edge importance weights
- Online Inference
  - ✓ New data inflow, real-time graph update
  - ✓ Can handle sequential information
- AliGraph Echo System On Cloud

Welcome to Try out  
**SYSTEM+ALGORITHM**

**Code:**

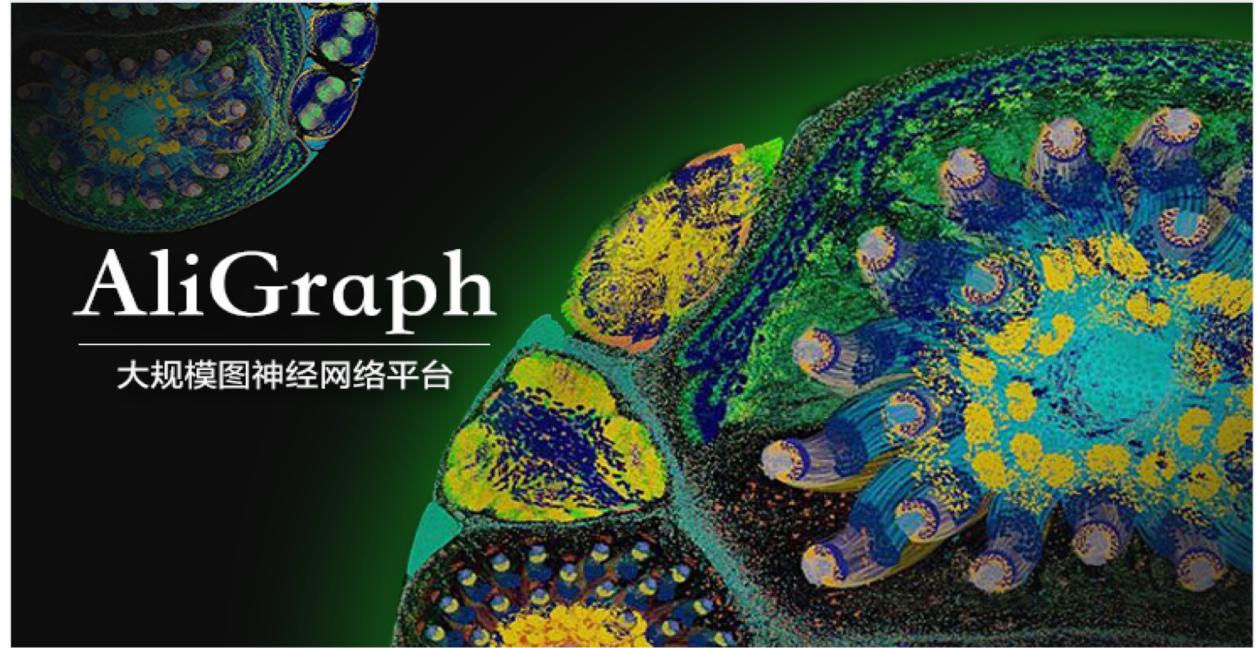
<https://github.com/alibaba/graph-learn>

**Q/A :**

[graph-learn@list.alibaba-inc.com](mailto:graph-learn@list.alibaba-inc.com)

**Paper:**

AliGraph: A Comprehensive Graph Neural Network Platform, VLDB 2019



**AliGraph: 大规模图神经网络平台**

AliGraph是新一代大规模图神经网络平台，其认知计算模型比起现有的深度学习技术有了突破性进展，被誉为人工智能2.0模型。



# Thanks

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Hongxia Yang : [yang.yhx@alibaba-inc.com](mailto:yang.yhx@alibaba-inc.com)

Wei Lin : [weilin.wl@alibaba-inc.com](mailto:weilin.wl@alibaba-inc.com)

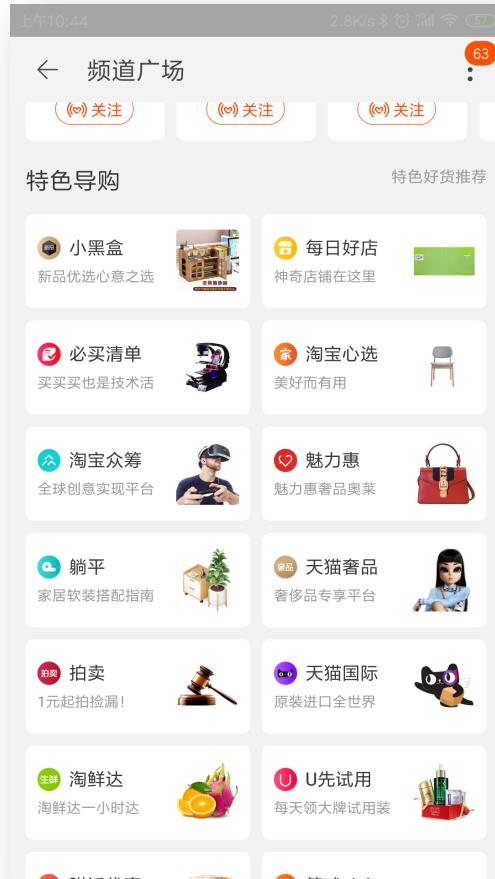
## Part Appendix : Cognitive

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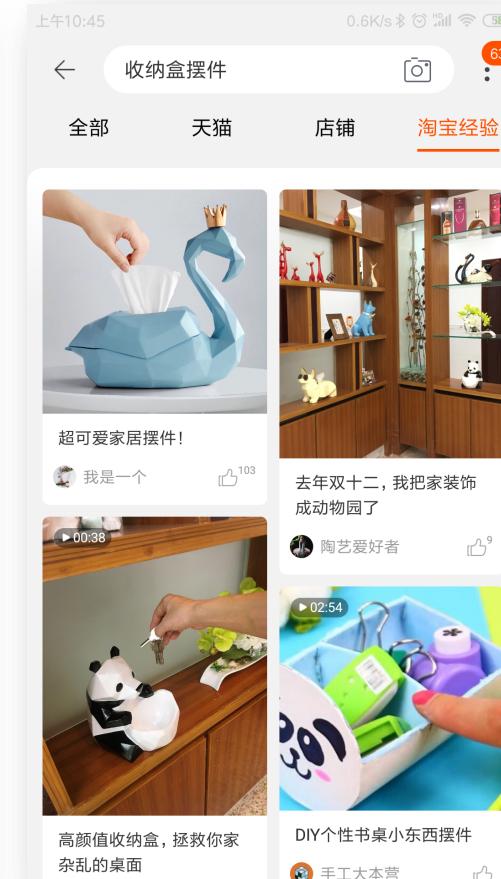
# Master Context



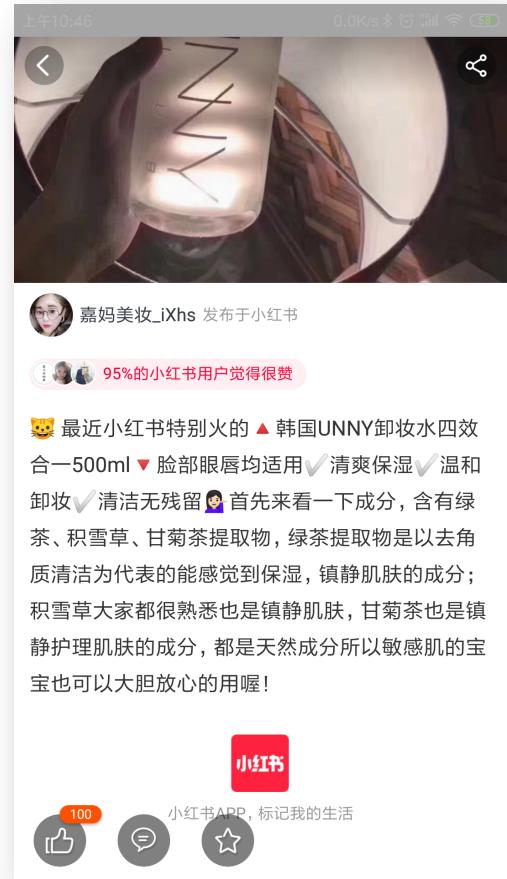
## Channels Page



## Taobao Experience



## XiaoHongShu



# Merchandise Context



## WeiTao

The WeiTao interface shows two posts. The first post is from '汉祥礼品专营店' (HanXiang Gift Shop) featuring a DIY wooden house project. The second post is from '蒙时代旗舰店' (MengShi Taiji Qigong Shop) advertising dried beef.

## Product Title

This Taobao product page for a HUAWEI Honor 8X smartphone highlights a 100 yuan discount. It includes a large image of the phone, a price of ¥1299 starting from, and a countdown timer. Key specifications listed are a 6.5 inch screen, 4GB RAM, 6GB ROM, and a 3750mAh battery.

## Product details

This Taobao product page for artificial roses provides detailed information about five different rose colors: pink, red, purple, green, and white. It includes a 'PRODUCT INFORMATION' section, '花朵细节' (Flower Detail) showing a close-up of a pink rose, and '叶子细节' (Leaf Detail) showing a close-up of a green leaf.

# User Context



## Evaluation



## Asking Everyone



## Query



# Value, Application and Landing of NLG



## Result Display:

中长款女童保暖呢子外套这款毛呢大衣,表面纯色和内里色调形成气质撞色,整体看上去尽显气质和个性,如果家中的宝宝正是一个特别有想法的孩子,个性十足,那么这款外套千万不要错过!作为基础款大衣,这款的不同之处就在与颜色,搭配黑色毛衣,炫酷一姐!

Mid-length girl's warm woolen coat, this woolen coat, the surface solid color and the inner tone form a temperament contrast, the overall look is full of temperament and personality, if the baby in the family is a particularly thoughtful child, full of personality, then Don't miss this coat! As a basic coat, the difference between this one lies in the color, with a black sweater, and a cool sister!

春装新款的中长款羊绒呢大衣,这款大衣采用优质的羊绒面料,柔软舒适,穿着舒适.双排扣的设计,简约大方,时尚百搭.搭配一条简单的牛仔裤,就可以美美的出门了.

The new mid-length cashmere coat for spring. This coat is made of high-quality cashmere fabric, soft and comfortable, and comfortable to wear. The double-breasted design, simple and elegant, fashionable and versatile. With a simple pair of jeans, you can go out beautifully .

小公主韩版加厚毛呢大衣这款黑色毛衣采用了经典的圆领设计,穿起来非常显气质,衣服的袖口和衣摆都做了螺纹收口,穿着更加舒适.衣身两侧的大口袋装饰,给衣服增加了一点童趣的味道,穿上很有气质哦.

Little princess Korean thick woolen coat. This black sweater adopts a classic round neck design, which is very elegant to wear. The cuffs and hem of the clothes have threaded closures, making it more comfortable to wear. The large pockets on both sides of the body are decorated, It adds a little childlike taste to the clothes, and it is very temperamental.

型色缤纷的春装新款.韩版气质的羊绒呢大衣,中长款不挑身材,3d立体剪裁,纽扣设计别致,贴布精致,不可或缺的一款.搭配尖头方扣浅口单鞋,绒面粗跟简直爱不释手,颜色也是很春天的颜色.

A new style of colorful spring clothes. Korean style of temperament cashmere coat, medium and long models do not pick up the figure, 3D three-dimensional tailoring, button design unique, delicate patch, an indispensable one. With pointed square button shallow shoes, velvet The thick noodles are simply too much to put it down, and the colors are also very spring colors.

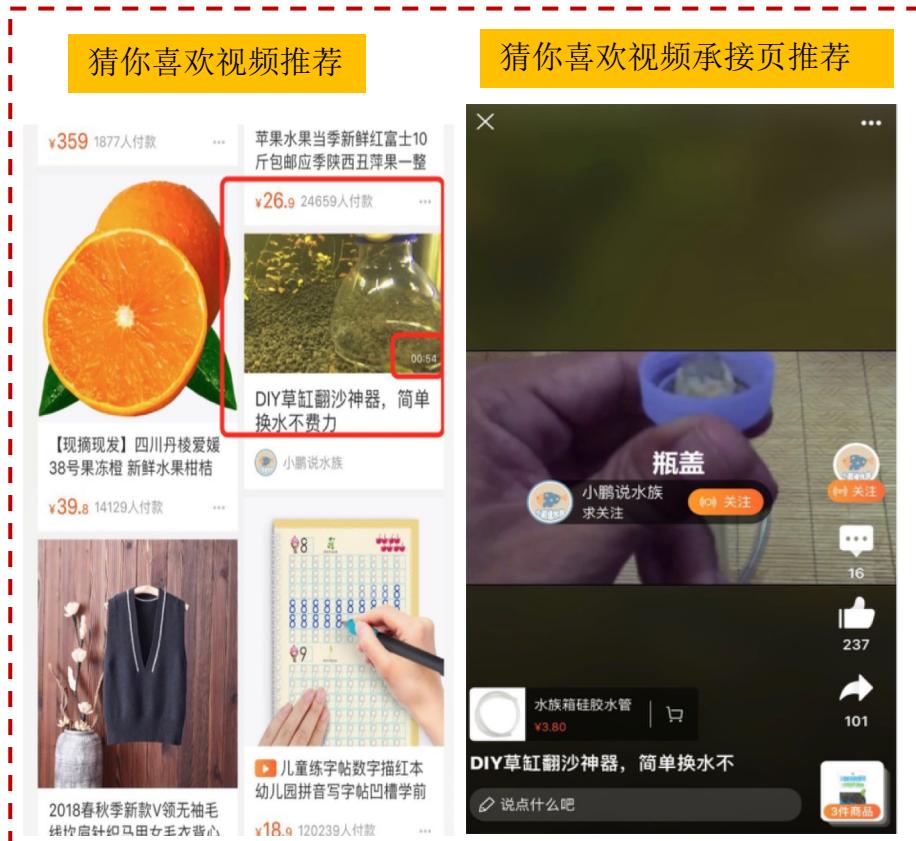


Note: Generate Chinese then translate to English

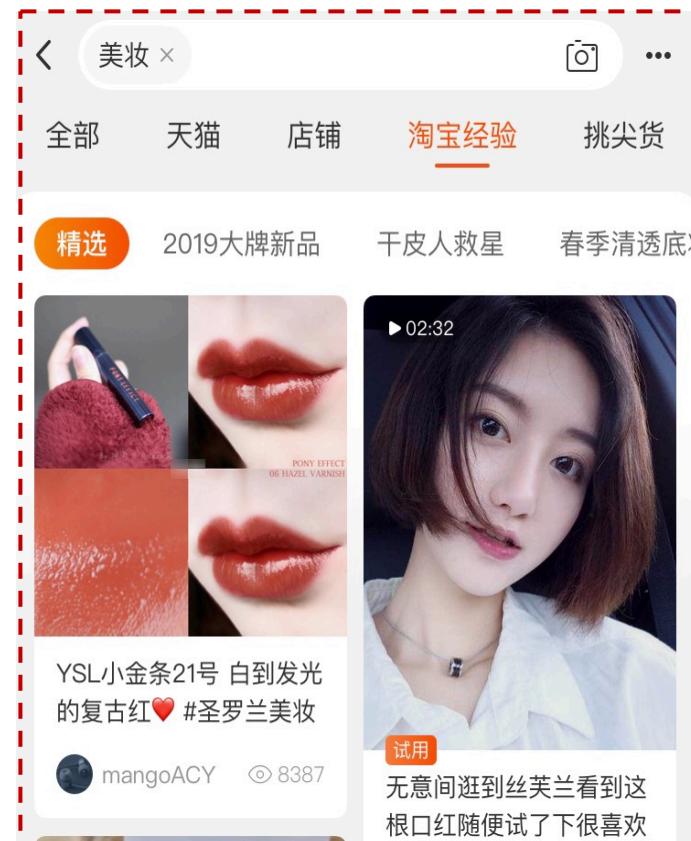
# Short video front desk service



Guess you like the video recommendation



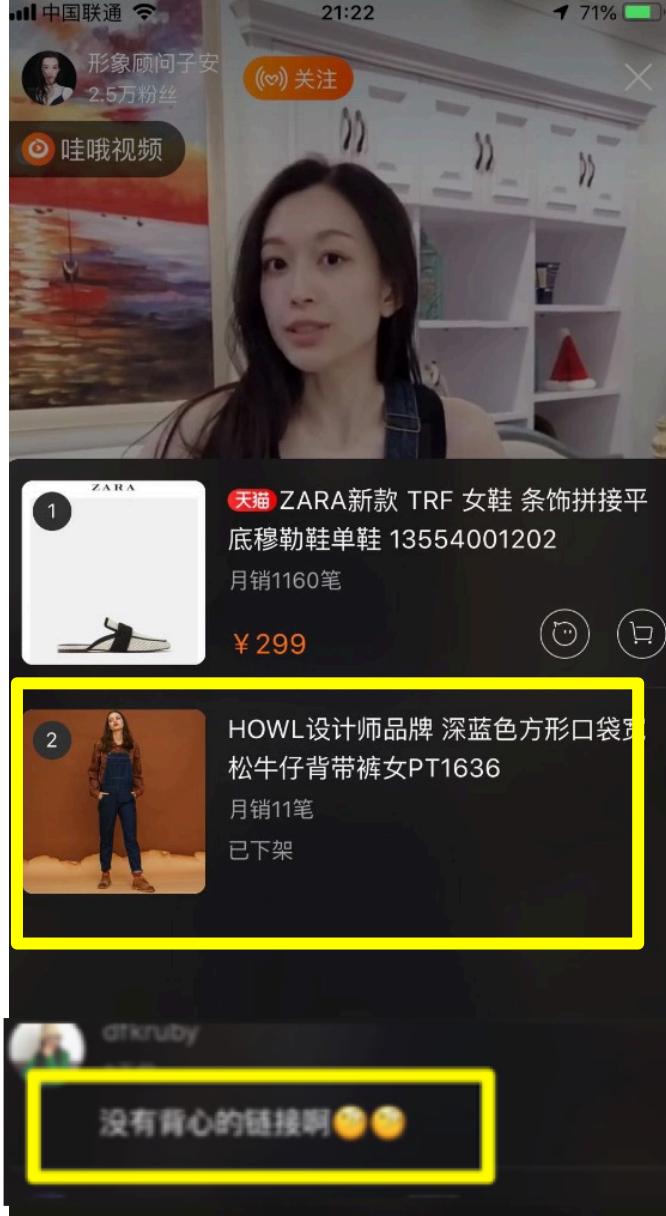
Taobao experience video content



Wow video



# Video product detection



# Video product detection---image target detection



- From the expert videos, the videos with higher products are selected as training data
- Generate a multi-product category data set with a single product image model
- Weak supervised object detection + Video description info
- Manual marking + few shot learning



# Video summary generation-1



- Video text description is the basic input information for video understanding

- Evaluate a large number of undescriptive and unclear descriptions in the video

