# Search Author Online

by Zhan Xinyu, Wang Zhongye, Xie Yichen, Yue Ye





- 02 Guideline
- 03 Framework



Visualization

# PART 01 Introduction

Presented by Yue Ye

### What is our website capable of ?

Search on all four keys: author name, paper title, affiliation name, conference name

Visualize various information about the item in the stats pages

Interactive UI designs, cool animations and pleasing color schemes Apply global search and accept users' command search

Provide various information
relevant to the item list pages

Label papers with their potential key words

**Recommend** similar papers to users in paper's stats pages with specific reasons





- 02 Guideline
- 03 Framework



Visualization

# PART 02 Guideline Presented by Wang Zhongye

Connect to our hotspot Group13 Password: group13present And visit http://192.168.1.157





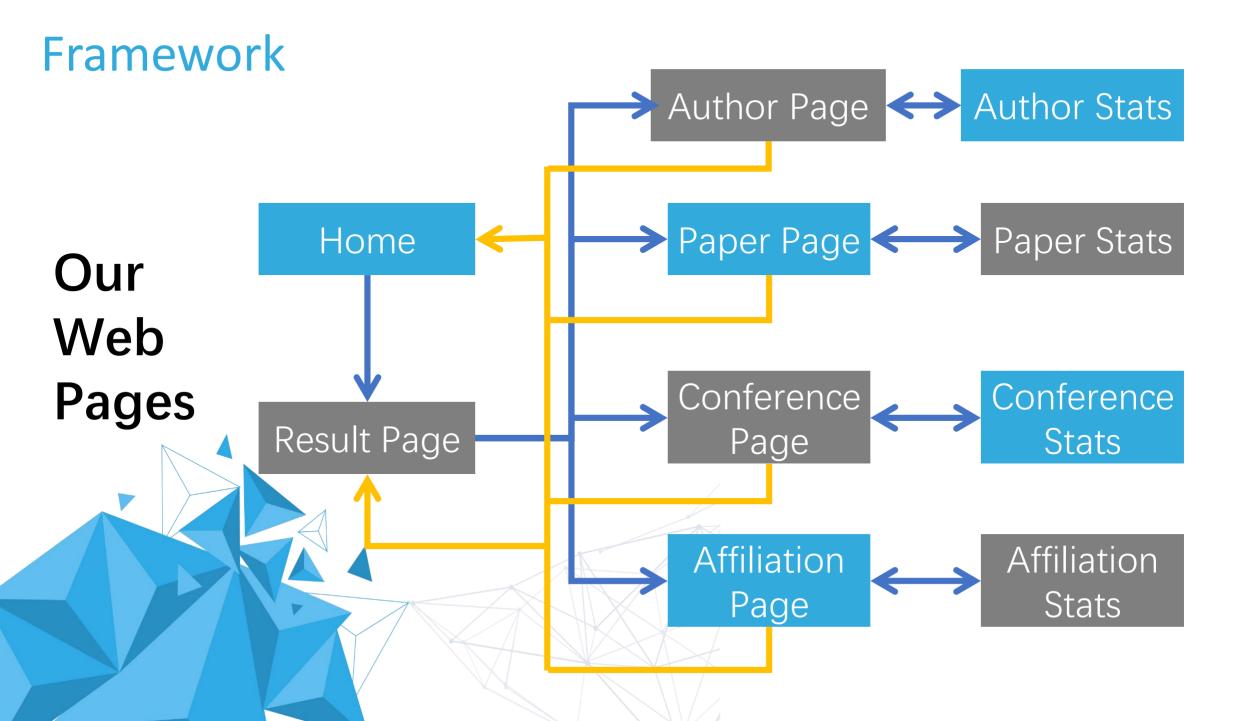
- 02 Guideline
- 03 Framework

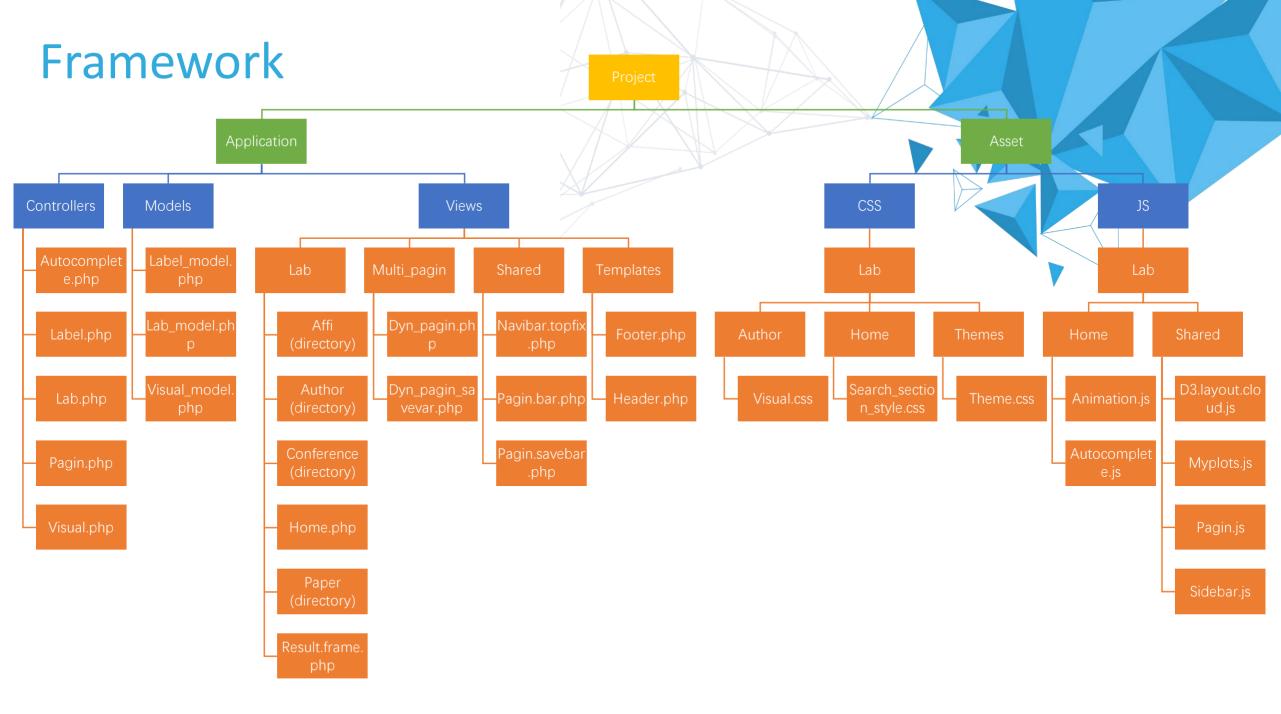


Visualization

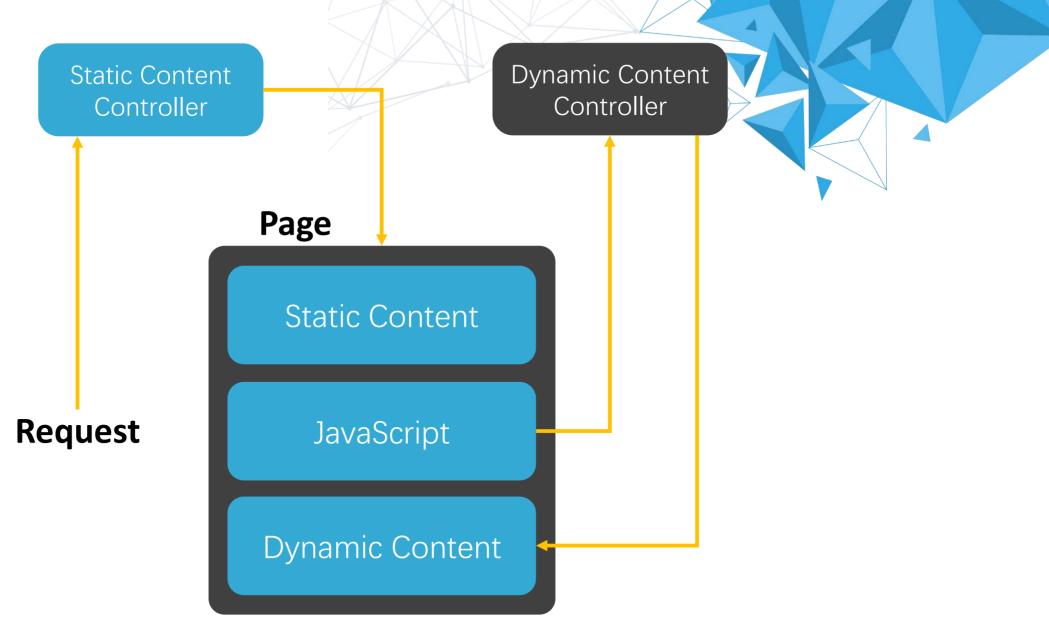
# PART 03 Framework

Presented by Zhan Xinyu





### Framework







- 02 Guideline
- 03 Framework

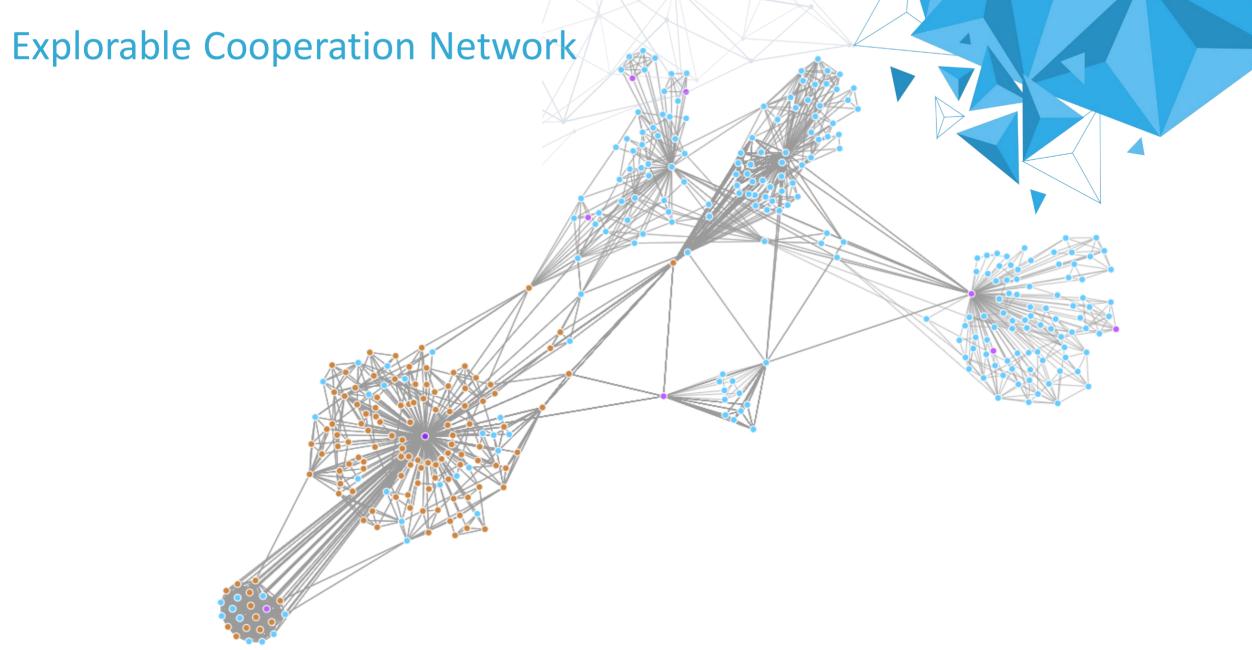


Visualization

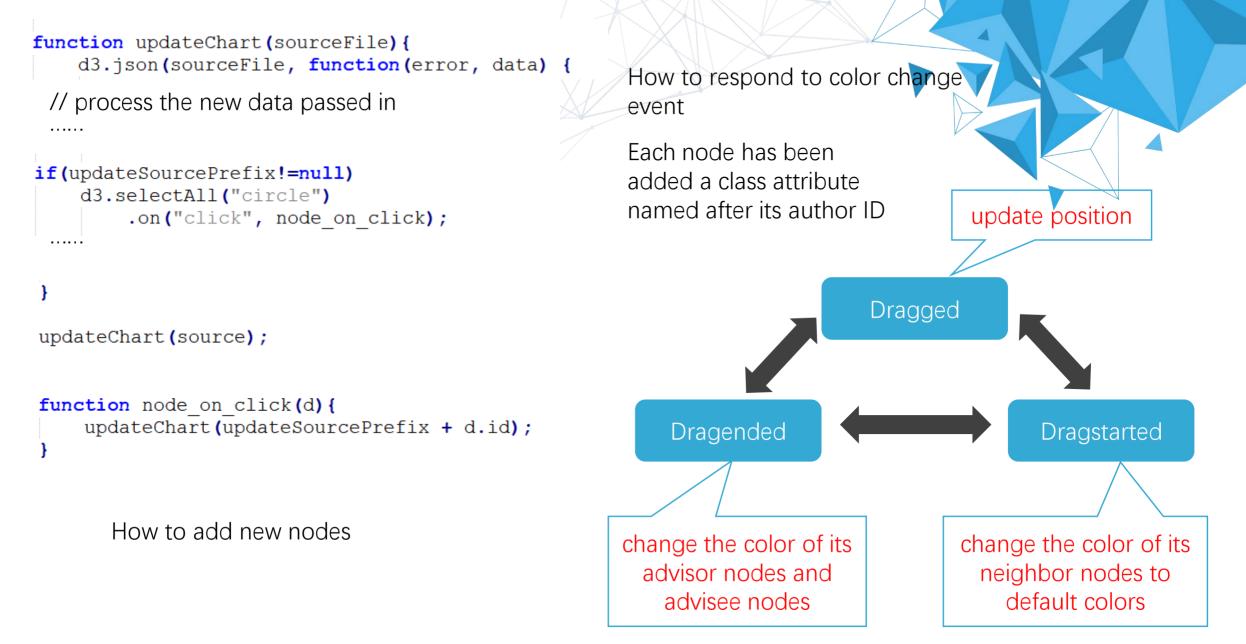
# PART 04

Visualization Presented by Wang Zhongye

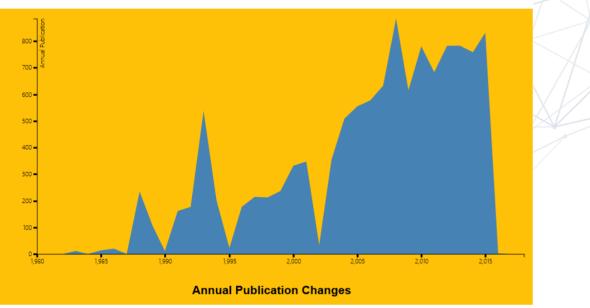
#### Visualization



#### Visualization

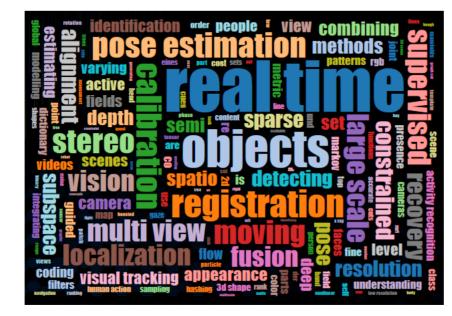


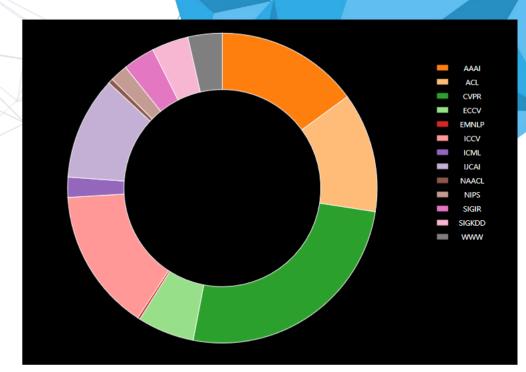
#### Visualization



#### **Area Graph**

It uses d3.line to plot the line graph and d3.area to plot the shadowed area.





#### Pie (Donut) Chart

It uses d3.arc to plot the arc of the donut chart and uses d3.pie to determine the layout of the plot

#### Word Cloud

It uses the d3.layout.cloud.js scripts produced by Jason Davies and Jonathan Feinberg on tht Github





- 02 Guideline
- 03 Framework



Visualization

# PART 05 Label and Recommendation

Presented by Xie Yichen We create two new databases: Labels and PaperLabel

Label	Frequency
station control	1
station congestion	1
station challenges	1
station antenna	1
station aist	1
station	22
stating	5

Label	PaperID
speech training	00002E77
training systems	00002E77
lateral shapes	00002E77
shapes	00002E77
vocal tract	00002E77
tract	00002E77

Find the frequency of words:

20966
22583
27447
30268

<u>....</u>

Many meaningless words !

Distinguish meaningful words by two ways:

- 1. Part of speech
- 2. Form two-words phrases

	3
.idea	jar
PC	PC
create_lab	create_pa
els.py	per_label.
	ру
PC	PC

part of sp

eech.py

PC

try.py

PC

words in r

ange.py

insert pap

er label.p

v

PC

test.py

PC

words.py

PC phrase.py

PC

char.py

PC

insert lab

els.py



PC

words tag

.py

#### NLTK(natural language toolkit) &Stanford NLP Group

#### from nltk.tag import StanfordPOSTagger

```
eng_tagger = StanfordPOSTagger(
```

#### Phrases

```
•••••
```

```
res = eng_tagger.tag(titles)
```

Choose several specific part of speech:

Adjective:JJ, JJR, JJSNoun:NN,NNS, NNP,NNPSAdverb:RB,RBR,RBSVerb:VB,VBD,VBG,VBN,VBP,VBZ

For other meaningless adjectives and nouns, We include them in phrase.

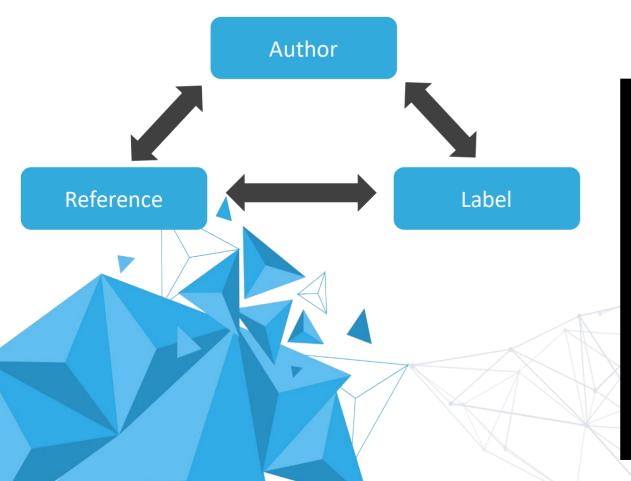
Judge by part of speech too

Specific combination of part of speech: Such as NN\_NN, JJ\_NN, VB\_NN.....

#### Recommendation

The recommendation is based on the combination of three factors: Order by the similarity

We will show what the two papers share in common on the website.



#### Recommendation

Two Stage Language Models For Information Retrieval Paper ID: 80E8E3FF - Venue: SIGIR - Published Year: 2002 - Times Cited: 33

#### We recommend this paper to you because:

It shares same coauthors: Chengxiang Zhai, John Lafferty. It shares same references: Relevance Based Language Models, Improving Two Stage Ad Hoc Retrieval For Short Queries, A Language Modeling Approach To Information Retrieval, A Hidden Markov Model Information Retrieval System, Document Language Models Query Models And Risk Minimization For Information Retrieval, Information Retrieval As Statistical Translation, Pivoted Document Length Normalization, Pivoted Document Length Normalization. It has a similarity score of 10.

# THANK YOU