Competitions & Datasets

The Sixth Conference on Natural Language Processing and Chinese Computing (NLPCC 2017)

- http://tcci.ccf.org.cn/conference/2017/cfpt.php

- before April 30, 2017

1. Overview of the Shared Tasks

There are six shared tasks in this year's NLPCC conference and the details of each task can be found in the document of task guidelines. Here we give a very brief overview of each task.

◇ **Chinese Word Semantic Relation Classification**

This task is focused on lexical semantics and it aims to evaluate the techniques of automatic classification of Chinese word semantic relations. Given a pair of Chinese words, it is required to classify the word pair into one of the following semantic relations: synonym (e.g., 计算机-电脑), antonym (e.g., 上涨-下降), hyponym (e.g., 食材-红薯), meronymy (e.g., 汽车-发动机) and person-affiliation relation (e.g., 医生-医院).

◇ **News Headline Categorization**

This task aims to evaluate the automatic classification techniques for very short texts, i.e., Chinese news headlines. Each news headline (i.e., news title) is required to be classified into one or more predefined categories.

◇ **Single Document Summarization**

This task provides a dataset for single document summarization of Chinese news articles, to evaluate and compare different document summarization techniques.

◇ **Emotional Conversation Generation**

SemEval 2017 Task 10: Extracting Keyphrases and Relations from Scientific Publications

https://scienceie.github.io/example.html

Name	Date modified	Type	Size
S0010938X1500195X.ann	25.4.2017 15:07	ANN File	1 KB
S0010938X1500195X.txt	25.4.2017 15:07	Text Document	1 KB
S0010938X1500195X.xml	25.4.2017 15:07	XML Document	158 KB
S0010938X1530161X.ann	25.4.2017 15:07	ANN File	1 KB
S0010938X1530161X.txt	25.4.2017 15:07	Text Document	1 KB
S0010938X1530161X.xml	25.4.2017 15:07	XML Document	109 KB
S0010938X12001163.ann	25.4.2017 15:07	ANN File	2 KB
S0010938X12001163.txt	25.4.2017 15:07	Text Document	2 KB
S0010938X12001163.xml	25.4.2017 15:07	XML Document	63 KB
S0010938X12002508.ann	25.4.2017 15:07	ANN File	1 KB
S0010938X12002508.txt	25.4.2017 15:07	Text Document	1 KB
S0010938X12002508.xml	25.4.2017 15:07	XML Document	110 KB

Datasets overview

1. Children's book test

2. Story Cloze Test

3. Google CNN-DailyMail (using now)

4. Microsoft msmarco dataset

5. SquAD

Children's book test

- http://cs.rochester.edu/nlp/rocstories/

- predict a blanked-out word of a sentence given the 20 previous sentences.

- MEMORY NETWORKS(Neural network)

> Datasets for Natural Language Processing > Children's Book Test > CBTest > CBTest > data		
cbt_test.txt	Date modified: 11/17/15 16:47	Size: 1.45 MB
cbt_train.txt	Date modified: 11/17/15 16:47	Size: 24.5 MB
cbt_valid.txt	Date modified: 11/17/15 16:47	Size: 1.12 MB
cbtest_CN_test_2500ex.txt	Date modified: 11/17/15 16:46	Size: 5.73 MB
cbtest_CN_train.txt	Date modified: 11/17/15 16:46	Size: 282 MB
cbtest_CN_valid_2000ex.txt	Date modified: 11/17/15 16:46	Size: 4.42 MB
cbtest_NE_test_2500ex.txt	Date modified: 11/17/15 16:46	Size: 5.32 MB
cbtest_NE_train.txt	Date modified: 11/17/15 16:46	Size: 236 MB
cbtest_NE_valid_2000ex.txt	Date modified: 11/17/15 16:46	Size: 4.12 MB
cbtest_P_test_2500ex.txt	Date modified: 11/17/15 16:46	Size: 5.68 MB
cbtest_P_train.txt	Date modified: 11/17/15 16:46	Size: 798 MB
cbtest_P_valid_2000ex.txt	Date modified: 11/17/15 16:46	Size: 4.46 MB
cbtest_V_test_2500ex.txt	Date modified: 11/17/15 16:46	Size: 5.42 MB
cbtest_V_train.txt	Date modified: 11/17/15 16:46	Size: 235 MB
cbtest_V_valid_2000ex.txt	Date modified: 11/17/15 16:46	Size: 4.25 MB

"Well, Miss Maxwell, I think it only fair to tell you that you may have trouble with those boys when they do come. Forewarned is forearmed, you know. Mr. Cropper was opposed to our hiring you. Not, of course, that he had any personal objection to you, but he is set against female teachers, and when a Cropper is set there is nothing on earth can change him. He says female teachers can't keep order. He 's started in with a spite at you on general principles, and the boys know it. They know he'll back them up in secret, no matter what they do, just to prove his opinions. Cropper is sly and slippery, and it is hard to corner him."

"Are the boys big ?" queried Esther anxiously.

"Yes. Thirteen and fourteen and big for their age. You can't whip 'em -- that is the trouble. A man might, but they'd twist you around their fingers. You'll have your hands full, I'm afraid. But maybe they'll behave all right after all."

Mr. Baxter privately had no hope that they would, but Esther hoped for the best. She could not believe that Mr. Cropper would carry his prejudices into a personal application. This conviction was strengthened when he overtook her walking from school the next day and drove her home. He was a big, handsome man with a very suave, polite manner. He asked interestedly about her school and her work, hoped she was getting on well, and said he had two young rascals of his own to send soon. Esther felt relieved. She thought that Mr. Baxter had exaggerated matters a little.

S: 1 Mr. Cropper was opposed to our hiring you .
2 Not , of course , that he had any personal objection to you , but he is set against female teachers , and when a Cropper is set there is nothing on earth can change him .
3 He says female teachers ca n't keep order .
4 He 's started in with a spite at you on general principles , and the boys know it .
5 They know he 'll back them up in secret , no matter what they do , just to prove his opinions .
6 Cropper is sly and slippery , and it is hard to corner him . ''
7 `` Are the boys big ? ''
8 queried Esther anxiously .
9 `` Yes .
10 Thirteen and fourteen and big for their age .
11 You ca n't whip 'em -- that is the trouble .
12 A man might , but they 'd twist you around their fingers .
13 You 'll have your hands full , I 'm afraid .
14 But maybe they 'll behave all right after all . ''
15 Mr. Baxter privately had no hope that they would , but Esther hoped for the best.
16 She could not believe that Mr. Cropper would carry his prejudices into a personal application .
17 This conviction was strengthened when he overtook her walking from school the next day and drove her home .
18 He was a big , handsome man with a very suave , polite manner .
19 He asked interestedly about her school and her work , hoped she was getting on well , and said he had two young rascals of his own to send soon .
20 Esther felt relieved .

q: She thought that Mr. _____ had exaggerated matters a little .

C: Baxter, Cropper, Esther, course, fingers, manner, objection, opinion, right, spite.

a: Baxter

Figure 1: **A Named Entity question from the CBT** (right), created from a book passage (left, in blue). In this case, the candidate answers C are both entities and common nouns, since fewer than ten named entities are found in the context.

Story Cloze Test – **train set**

	A	B	C	D	E	F	G	H
1	InputStoryid	InputSentence1	InputSentence2	InputSentence3	InputSentence4	RandomFifthSentenceQuiz1	RandomFifthSentenceQuiz2	AnswerRightEnding
2	4a0b-b267-	to the club to dance.	fun and always invite.	tag along last	broke a friend's toe.	inviting me out as I am so much	please stay home.	2
3	4f56-871d-	the other day.	nice enough for a	getting there I started	and it was hard to	had to go back home.	spring flowers.	1
4	45f2-ad92-	children.	boring life.	decided to meet up	decisions that night	be happy with her decision.	next day.	2
5	454c-8d8b-	mom baked apple pie.	always had to wait	time he would sneak	used must have been	delicious.	Josh got sick.	2
6	4541-9e66-	for his new album.	experiencing writer's	himself to write but it	out with some friends,	back home to write.	painting.	1
7	416d-81fb-	counting the dollar bills	the store and held	and started to	the people to remain	cash so they would go away.	high school reunion.	1
8	47b1-a583-	a new car.	during the weekend.	house and asked me	for some reason they	to my house.	They liked me a lot after that.	1
9	4c70-8a65-	obnoxious boy in Kerry's	class discussion with	never get him to be	up to class with	Kerry was disappointed.	Kerry was so grateful!	2
10	485d-9599-	particularly like all of the	immigrants were	when an immigrant	was kind and became	deported.	prejudices.	2

Story Cloze Test ━ **Test set**

A1 | storyid

	A	B	C	D	E	F	G	H	I
1	storyid	storytitle	sentence1	sentence2	sentence3	sentence4	sentence5		
2	8bbe6d11	David Drops the Weight	David noticed he had put on	He examined his habits to try a	He realized he'd been eating	He stopped going to burger place	After a few weeks, he started to feel much better.		
3	0beabab2	Frustration	Tom had a very short temper	One day a guest made him very	He punched a hole in the wa	Tom's guest became afraid and le	Tom sat on his couch filled with regret about his actions.		
4	87da1a22-	Marcus Buys Khakis	Marcus needed clothing for a	All of his clothes were either to	He decided to buy a pair of k	The pair he bought fit him perfec	Marcus was happy to have the right clothes for the event.		
5	2d16bcd6-	Different Opinions	Bobby thought Bill should bu	Bill thought a truck would be be	Bobby pointed out two vehi	Bill was set in his ways with conv	He ended up buying the truck he wanted despite Bobby's advice.		
6	c71bb23b-	Overcoming shortcomings	John was a pastor with a very	He tried to memorize his sermo	He decided to learn to sing t	He then made all his sermons int	His congregation was delighted and so was he.		
7	4d7b022e-	Melody's trip to the aquariu	Melody's parents surprised h	Melody took a nap during the tv	When they arrived, Melody	At the aquarium Melody saw shar	After five hours at the aquarium, Melody and her family drove home.		
8	8036c905-	Pop Quiz	The math teacher announce	While some students complain	I took out my pencil and beg	About 5 minutes later, I finished.	I stood up feeling confident and turned it in.		
9	77338898-	My first girlfriend	My first girlfriend i met on th	She lives about 4 hours awa fr	Finally after 2 years we met	She stayed with me for a week or	We decided we couldn't be apart so she moved in with me.		
10	110fafd1-2	Charlie Horse	I got Charlie Horse when I wa	He's a brown stuffed horse, and	He was my best friend, and a	I laid him next to me, smelling hi	I liked to listen to my radio as I fell asleep cuddling him.		
11	13573c2e-	Corn	Laura loved corn.	So she decided to grow some in	The whole process of growir	But she realized that they require	So Laura quickly abandoned her corn garden idea.		
12	c400d38a-	New Hair Color	Andy was invited to a Hallow	Andy figured that for dramatic	Since Andy's costume was gr	After the stylist finished the colo	Andy was disappointed with his new, bold, green hair color.		
13	8fbef343-	Winner	Luke was playing hockey at s	The game was tied and almost	Then Luke made the winnin	Everybody cheered!	Luke was so proud of himself!		
14	3be3719a-	Cross country	Robbie was competing in a c	He was halfway through when I	Robbie wasn't sure he could	He stopped for a minute and stre	Robbie began to run again and finished the race in second place.		
15	a8d6e66b-	Traffic Troubles	Jude was very excited about	On the way to the arena, he got	He only had an hour before	He thought he wasn't going to be	Luckily, the traffic cleared up in time for him to get to the ceremony.		
16	8fba56f8-4	Not Santa	Beth sent a letter to Santa Cl	She received a letter back in th	Beth did not think that it sou	She sent another letter calling th	She did not receive another letter back in the mail.		
17	038ac579-	Miss Fussy	Our granddaughter Anna is v	She is only two, but wants to pi	Today her mom wanted Ann	Anna started crying.	They let her wear a t-shirt and shorts instead.		
18	b94e1810-	Getting to the Store	Jake needed a ride to the sto	His girlfriend was working and v	His brother was in the middl	Jake decided to take the bus to tl	He got what he needed all by himself.		
19	6be1d668-	The Sale	I'd been looking for a stand f	I looked everywhere, but the o	I happened upon a yard sale	She had a stand that was perfect,	It looks great in my den.		

Facebook The bAbI project

- https://research.fb.com/projects/babi/

- Experiments in paper: Memory Neural Network

The bAbI project

This page gather resources related to the bAbI project of Facebook AI Research which is organized towards the goal of automatic text understanding and reasoning. The datasets we have released consist of:

- The (20) QA bAbI tasks
- The (6) dialog bAbI tasks
- The Children's Book Test
- The Movie Dialog dataset
- The WikiMovies dataset
- The Dialog-based Language Learning dataset
- The SimpleQuestions dataset
- HITL Dialogue Simulator

Microsoft msmarco dataset

- http://www.msmarco.org/

- The questions in the dataset are real anonymized queries issued through Bing or Cortana

- the documents are related web pages which may or may not be enough to answer the question

- every question in the dataset, a crowdsourced worker is asked to answer it, if they can, and to mark relevant passages which provide supporting information for the answer. If they can't answer it we consider the question unanswerable

Experiments

	Description	ROUGE-L
Best Passage	Best ROUGE-L of any passage	0.351
Passage Ranking	A DSSM-alike passage ranking model	0.177
Sequence to Sequence	Vanilla seq2seq model predicting answers from questions	0.089
Memory Network	Seq2seq model with MemNN for passages	0.119

Table 5: ROUGE-L of Different QA Models Tested against a Subset of MS MARCO

Train set

```
Paste  Copy  |  Format  Remove white space  |  Clear  |  Load JSON data

{
  "passages": [
    {
      "is_selected": 1,
      "url": "http://www.indeed.com/cmp/Walgreens/salaries",
      "passage_text": "The average Walgreens salary ranges from approximately $15,000 per year for Customer Service Associate / Cashier to $179,900 per y
approximately $7.35 per hour for Laboratory Technician to $68.90 per hour for Pharmacy Manager. Salary information comes from 7,810 data points collected
    },
    {
      "is_selected": 0,
      "url": "http://www.answers.com/Q/What_is_the_average_gross_sales_volume_of_a_single_Walgreen's_Store",
      "passage_text": "The average revenue in 2011 of a Starbuck Store was $1,078,000, up  from $1,011,000 in 2010.    The average ticket (total purchase
In 2008, the average ticket was flat (0.0% change)."
    },
    {
      "is_selected": 0,
      "url": "http://news.walgreens.com/fact-sheets/frequently-asked-questions.htm",
      "passage_text": "In fiscal 2014, Walgreens opened a total of 184 new locations and acquired 84 locations, for a net decrease of 273 after relocatic
Walgreens is about 14,500 square feet and the sales floor averages about 11,000 square feet. How do we select locations for new stores? There are several
traffic patterns, demographics and locations near hospitals."
    },
    {
      "is_selected": 0,
      "url": "http://www.babson.edu/executive-education/thought-leadership/retailing/Documents/walgreens-strategic-evolution.pdf",
      "passage_text": "th store in 1984, reaching $4 billion in sales in 1987, and $5 billion two years later. Walgreens ended the 1980s with 1,484 store
margins remained just below 3 percent of sales, and returns on assets of less than 10 percent."
    },
    {
      "is_selected": 0,
      "url": "http://www.trefis.com/stock/wag/articles/199532/key-trends-driving-walgreens-business/2013-08-07",
      "passage_text": "The number of Walgreen stores has risen from 5,000 in 2005 to more than 8,000 at present. The average square footage per store stc
our review period. Walgreen earned $303 as average front-end revenue per store square foot in 2012."
    },
    {
      "is_selected": 0,
      "url": "http://www.walgreens.com/storelocator/find.jsp?requestType=locator",
      "passage_text": "Your Walgreens Store. Select a store from the search results to make it Your Walgreens Store and save time getting what you need.
prescriptions, photos, in store orders and finding deals in the Weekly Ad."
    }
  ],
  "query_id": 9652,
  "answers": [
    "Approximately $15,000 per year."
  ],
  "query_type": "numeric",
  "query": "walgreens store sales average"
}
```

Test set

Paste Copy | Format Remove white space | Clear | Load JSON data

```
{
  "query": "does human hair stop squirrels",
  "query_id": 0,
  "query_type": "description",
  "passages": [
    {
      "passage_text": "We have been feeding our back yard squirrels for the fall and winter and we noticed that a few of them have missing fur. One has a patch missing down his back and under both arms. Also another has some missing on his whole c
a good appetite.",
      "url": "http://web.extension.illinois.edu/askextension/thisQuestion.cfm?ThreadID=18526&catID=213&AskSiteID=90"
    },
    {
      "passage_text": "Critters cannot stand the smell of human hair, so sprinkling a barrier of hair clippings around your garden, or lightly working it into the soil when you plant bulbs, apparently does have some merit. The whole thing kind of
that we are the ones that stink.",
      "url": "http://www.onehundreddollarsamonth.com/has-anyone-tried-using-hair-to-keep-squirrels-and-deer-out-of-your-garden/"
    },
    {
      "passage_text": "Spread some human hair around your vegetable and flower gardens. This will scare the squirrels away because humans are predators of squirrels. It is better if the hair hasn't been washed so the squirrels will easily pick up
      "url": "http://www.gardenguides.com/106838-rid-ground-squirrels-tomato-plants-flowers.html"
    },
    {
      "passage_text": "1 You can sprinkle blood meal around your garden as well. 2  Don't trap and relocate squirrels. 3  This is a losing battle since the population of squirrels is extremely high. 4  Also, if the animal is a female there is a hi
from babies that depend on her for survival.",
      "url": "http://www.almanac.com/content/squirrels"
    },
    {
      "passage_text": "Hair loss in squirrels can be caused by mange or fungal disease. Mange is a disease caused by microscopic mites that burrow under the skin. The squirrel mange mite has been reported in both fox and gray squirrels. There have
being transmitted to humans or domestic pets.",
      "url": "http://web.extension.illinois.edu/askextension/thisQuestion.cfm?ThreadID=15895&catID=213&AskSiteID=90"
    },
    {
      "passage_text": "1 You can also scatter dog or human hair around your garden. 2  One readers shares, "I used to have a problem with squirrels digging up my bulbs. 3  Now, once in the spring and once in the fall, I ask my hairdresser to save
this into the soil.",
      "url": "http://www.almanac.com/content/squirrels"
    },
    {
      "passage_text": "Rabbit repellent. Human hair will keep rabbits out of your garden!! Collect hair from your brushes and spread it around your garden! (via Pioneer Thinking). Natural mulch. When woven into a mat, it retains moisture, it deter
actually reduce soil erosion. (via NPR). Plant fertilizer.",
      "url": "http://www.mnn.com/your-home/organic-farming-gardening/blogs/is-human-hair-good-for-your-garden"
    }
  ]
}
```

Google CNN-DailyMail (using now)

- http://cs.nyu.edu/~kcho/DMQA/

- large scale supervised reading comprehension data

Experiment

- class of attention based deep neural networks, with minimal prior knowledge of language structure

- CNN & Daily mail – train set(next page)

http://web.archive.org/web/20100708085257id_/http://us.cnn.com/2009/HEALTH/11/30/oral.cancer.women/index.html

(@entity0) -- @entity1 , 54 , knows the importance of preventive medicine . as a health care worker , she goes for scheduled checkups . s
exam last year , she did n't expect more than a cleaning , maybe a filling . but her dentist found something more serious . " she told me i
needed to be checked . " @entity1 said . " after a lot of tests , they found it was oral cancer . " @entity1 was surprised . " i thought su
i never drank heavily , and i never had a family history of this . how could this be ? " she asked . about 34,000 new @entity25 cases of or
numbers are rising , according to the @entity28 . although oral cancer has primarily been a man 's illness , affecting six men for every wo
past 10 years , that ratio has become two men to each woman . the foundation attributes the rise to the increase in the number of women who
tobacco and alcohol trigger oral cancer . but there is another factor . in some cases , women are being found to have oral cancer caused by
version 16) . different versions of @entity51 are present in most cases of cervical cancer . like cervical cancer , in oral cancer cases ,
activity . watch more on the hpv - oral cancer link based on recent data , the @entity28 believes in people under the age of 50 , @entity51
primary cause of the spread of oral cancer . @entity1 was shocked when she heard her cancer contained hpv cells . " i said , ' what ? how i
doctors told me that it might have been caused by something i did , years and years ago . it could actually show up later and cause the can
causes irregular cells to multiply , the virus thrives in a moist , dark environment , said dr. @entity84 , a prosthodontist and director o
prosthodontists specialize in tooth replacement , jaw restructuring , disease and injuries to the mouth . " the mouth is a perfect place fo
during oral sex , it stays in the mouth and causes lesions . many eventually turn cancerous . " it 's something we are very much aware of a
said . @entity1 was lucky . her dentist caught the cancer before it spread , a fact that @entity110 attributes to her biannual checkups . w
an 80 to 90 percent survival rate . a good dentist will look for possible signs of oral cancer by checking the cheeks , the tongue , the to
says the @entity122 . " that 's why we ask the patients simple things , to move your tongue , move it sideways , stick your tongue out , sa
get a good view of the mouth . " @entity79 : @entity51 infection since @entity110 's cancer was diagnosed in march 2008 , she 's undergone
radiation . she is still in rehabilitation to help her chew and open her mouth wider . she uses a mouth exerciser that helps her stretch th
operation . she also went through rehab when she broke her collarbone after her radiation treatments , because her bones had become so brit
said with a shrug . " that 's part of the side effects from the radiation . it affects your bones . " her other side effects are minor . sh
water with her everywhere . she avoids anything spicy or acidic , because it can sting the area where the cancer was removed . she lost alm
could n't eat . in some ways she considers the weight loss a good thing because it also reduced her high blood pressure and she was able to
there is a blessing , " she said . although @entity110 is cancer free now , she said she is considering enrolling in a trial that uses a fo
oral cancer from recurring . @entity79 : chewing tobacco : not a safe alternative to cigarettes " it 's been a long road to recovery . but
treatment and great care , " she said . " but the most important thing is i want women to be aware of oral cancer and make sure they do n't
it could be something , " @entity1 said . " and it needs to be checked out . that checkup can save your life . "

about 34,000 new @placeholder cases of oral cancer diagnosed annually ; numbers are rising

@entity25

@entity1:Folsom
@entity0:CNN
@entity25:U.S.
@entity28:Oral Cancer Foundation
@entity87:Bethesda
@entity51:HPV
@entity79:MayoClinic.com
@entity86:Obeid Dental
@entity110:Folsom
@entity88:Maryland
@entity84:Obeid
@entity122:American Dental Association

Stanford SquAD

- **Checked it last week**

- https://rajpurkar.github.io/SQuAD-explorer/

Experiment method

	Exact Match		F1	
	Dev	Test	Dev	Test
Random Guess	1.1%	1.3%	4.1%	4.3%
Sliding Window	13.2%	12.5%	20.2%	19.7%
Sliding Win. + Dist.	13.3%	13.0%	20.2%	20.0%
Logistic Regression	40.0%	40.4%	51.0%	51.0%
Human	80.3%	77.0%	90.5%	86.8%

Table 5: Performance of various methods and humans. Logistic regression outperforms the baselines, while there is still a significant gap between humans.

Dataset	Question source	Formulation	Size
SQuAD	**crowdsourced**	**RC, spans in passage**	**100K**
MCTest (Richardson et al., 2013)	crowdsourced	RC, multiple choice	2640
Algebra (Kushman et al., 2014)	standardized tests	computation	514
Science (Clark and Etzioni, 2016)	standardized tests	reasoning, multiple choice	855
WikiQA (Yang et al., 2015)	query logs	IR, sentence selection	3047
TREC-QA (Voorhees and Tice, 2000)	query logs + human editor	IR, free form	1479
CNN/Daily Mail (Hermann et al., 2015)	summary + cloze	RC, fill in single entity	1.4M
CBT (Hill et al., 2015)	cloze	RC, fill in single word	688K

Dataset	Segment	Query Source	Answer	# Queries	# Documents
MCTest	N	Crowdsourced	Multiple choice	2640	660
WikiQA	N	User logs	Sentence selection	3047	29.26K sentences
CNN/Daily Mail	N	Cloze	Fill in entity	1.4M	93K CNN, 220K DM
Children's Book	N	Cloze	Fill in the word	688K	688K contexts, 108 books
SQuAD	N	Crowdsourced	Span of words	100K	536
MS MARCO	Y	User logs	Human generated	100K	1M passages, 200K+ doc.

Table 1: Comparison of some properties of existing datasets vs MS MARCO. MS MARCO is the only large dataet with open ended answers from real user queries