BIG 2017 CUP

Bin Shao on behalf of BIG 2017 CUP organizers

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What makes a good cup problem?

- A good data set: interesting and big
- A good problem
 - 'Seemingly easy': easy to understand, easy to create a solution
 - Perfect solutions are extremely hard or impossible to get
- Easy to do objective judgement

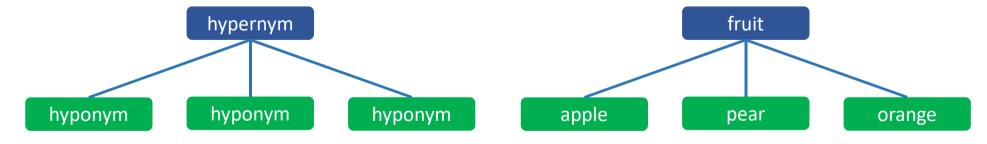
BIG CUP Problems

• In partnership with the BIG committee, Microsoft have sponsored/organized three BIG CUPs for BIG 2015, 2016, and 2017

	Data Set	Problem
BIG 2015 CUP	Microsoft malware dataset	Classify malware based on file content and characteristics
BIG 2016 CUP	Microsoft academic graph	Verify whether a paper is written by a given author

BIG 2017 CUP

- Background: common sense is the shared general knowledge about the world
- Easy to handle by human beings, but very hard for machines
 - There is an infinite amount of commonsense knowledge
 - There are always exceptions, 'not all birds can fly'
 - "AI-Complete"
- The IsA relationship between concepts is a basic type of commonsense knowledge



BIG 2017 CUP

- The task is to predict whether a pair of given concepts has IsA relationship
- Data set: Microsoft Concept Graph
 - 5,401,933 concepts
 - 87,603,947 IsA relations
- Evaluation
 - Each team needs to build a REST endpoint
 - The online judge system pushes test cases to the REST endpoint of each team
 - Teams are ranked by accuracy

REST Endpoint

• On receiving a pair of concepts in JSON format, the endpoint needs to respond with either {"result": "yes"} or {"result": "no"}.

```
{"Hyponymy": "Microsoft", "Hypernymy": "Software Company"} {"result": "yes"}

{"Hyponymy": "dog", "Hypernymy": "metal"} {"result": "no"}
```

Participation

- The BIG 2017 CUP is a team-based contest
- Each team can include one or two members
- Each team can set up only one REST service endpoint
- More info: https://big2017.org/big-2017-cup/
- There are 35 registered teams

BIG 2017 CUP Winner Announcement

Winners	Team	Members	Affiliation	Accuracy
1 st winner	Dakgalbi	Gyeongbok Lee, Hyunsouk Cho	Yonsei University, Postech	96%
2 nd winner	ProbasePlus	Jiaqing Liang	Fudan University	87.33%
3 rd winner	Patron	Seungtaek Choi, Kyungjae Lee	Yonsei University	84.67%

Congratulations!

Thanks!