

## Word Sense Disambiguation:

Sense Ambiguity: Multiple sense or Several Meanings.

→ BASS

↳ Electric guitar & bass player.

↳ Fisherman decided -he stripped bass in lake was too thin.

→ DISAMBIGUATION :

→ Knowledge Based

→ ML

↳ Supervised, Semi-Supervised, Unsupervised.

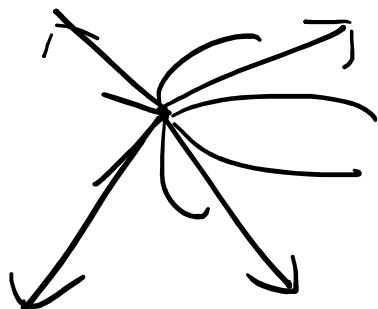
→ Hybrid ~ Ensemble

→ Knowledge Based : Overlap Approaches :

↳ HRI (Machine Readable Dict)

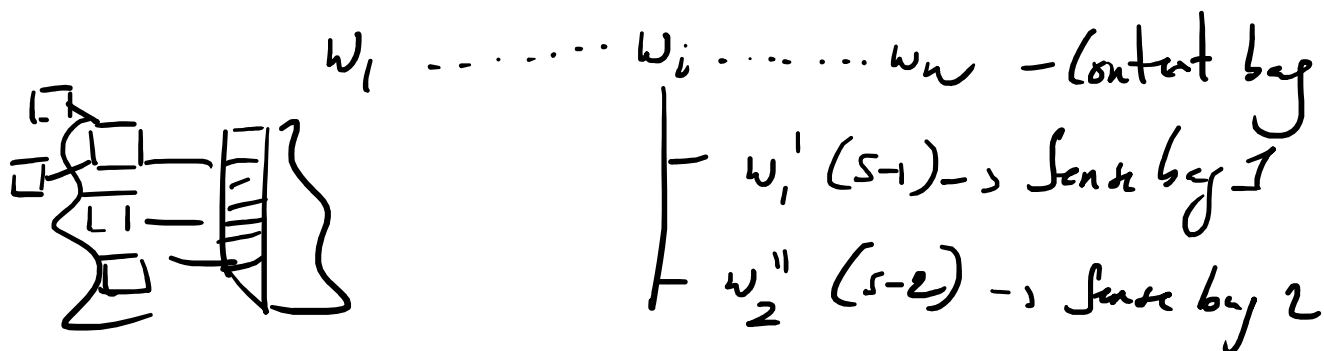
↳ Sense bar & Context bar.

- ↳ Sense bag & Context bag
- ↳ Sense definitions & weights



16 ~ 100

k	king	queen	apple	ruby
g	1			
A	0.75	1		
R	0.32		1	
	0.87			1



→ Lesk's Algorithm:

↳ Sense Bag:

↳ Context Bag:

→ Walker's Algorithm: (Thesaurus Based Approach)

→ ST:

→ 1

S2: It adds +1 to score of sense of the words.

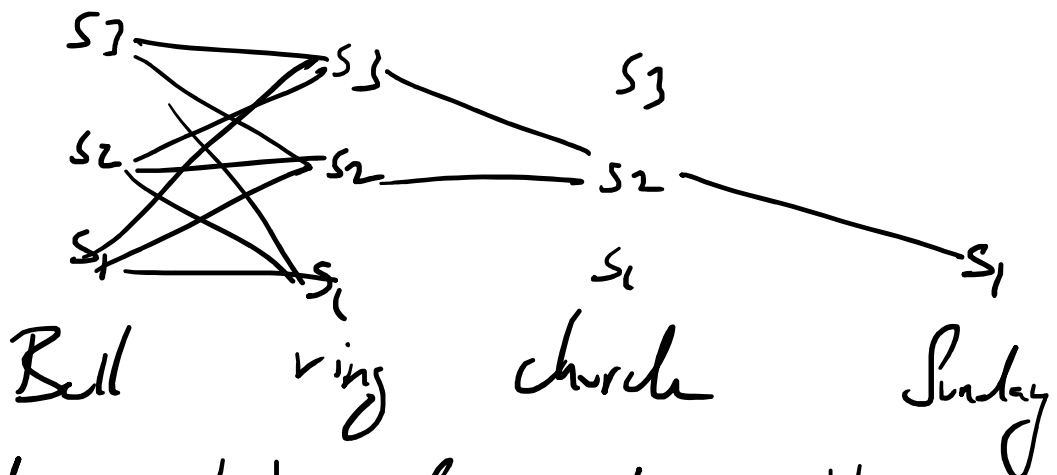
Eg: The money in this bank fetches an interest of 8% per annum.

Target Word: Bank.

Clue words from context: Money, Interest, Per annum.

	Sense 1: Finance	Sense 2: Location
Money	+1	0
Interest	+1	0
Fetch	0	0
Annum	+1	0
Total	3	0

→ USD using Random Walk Algorithm:



$s_1$ : Add a vertex for each possible sense

- S1 : Add a vertex for each possible  $v$  sense
- S2 : Add weighted edges (Leck's Algorithm)
- S3 : Apply Page Rank -
- S4 : Select vertex(sense) which has highest score -