



# Assignment

## Probabilistics CKY Parsing

Lecturer:

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Stundent:

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S->NP VP 0.14*0.80*0.00000076545 =0.0000000857304					
None	VP-> Verb NP 0.105*0.00003645*0.2 =0.00000076545				
S->NP VP 0.14*0.80*0.00081 =0.00009072	None	NP -> Det Nominal 0.3*0.0006075*0.2 =0.00003645			
None	VP -> Verb NP 0.3 * 0.0135*0.2 = 0.00081	None	Nominal-> Nominal PP 0.05*0.225*0.054 =0.0006075		
S->NP VP 0.14*0.80*0.105 = 0.01176		NP -> Det Nominal 0.2*0.3*0.225 = 0.0135	None	PP-> Preposition NP 0.3 *1*0.18 = 0.054	
Pronoun 0.4 NP-> Pronoun 0.35*0.4 = 0.14	Noun 0.1/ Verb 0.3 Nominal -> Noun 0.75*0.1= 0.075 NP->Nominal 0.15*0.075 =0.01125 VP-> Verb 0.3*0.35 = 0.105	Det 0.3	Noun 0.3 Nominal -> Noun 0.75*0.3 = 0.225 NP-> Nominal 0.225*0.15 = 0.03375	Preposition 0.3	Proper-Noun 0.6 NP -> Proper-Noun 0.6*0.3 = 0.18
I	book	a	flight	to	Houston

S->NP VP 0.14*0.80*0.000000042525 =0.0000000047628					
None	VP-> Verb NP 0.14*0.2*0.00000151875 =0.000000042525				
S->NP VP 0.14*0.80*0.000054 =0.000006048	None	NP -> Det Nominal 0.3*0.0000253125*0.2 =0.00000151875			
None	VP -> Verb NP 0.4 * 0.000675*0.2 = 0.000054	None	Nominal-> Nominal PP 0.05*0.075*0.00675 =0.0000253125 VP -> Verb PP 0.15*0.3*0.00675 =0.00030375 VP->VP PP 0.105*0.15*0.00675 =0.0001063125		
S->NP VP 0.14*0.80*0.14 = 0.01568	None	NP -> Det Nominal 0.2*0.3*0.01125= 0.000675	None	PP-> Preposition NP 0.2 *1* 0.03375 = 0.00675	
Pronoun 0.4 NP-> Pronoun 0.35*0.4 = 0.14	Verb 0.4 VP -> Verb 0.35*0.4=0.14	Det 0.3	Noun 0.1/ Verb 0.3 Nominal -> Noun 0.75*0.3= 0.075 NP->Nominal 0.15*0.075 =0.01125 VP-> Verb 0.3*0.35 = 0.105	Preposition 0.2	Noun 0.3 Nominal -> Noun 0.75*0.3 = 0.225 NP -> Nominal 0.15*0.225 = 0.03375
You	prefer	a	book	on	Flight