

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 |

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| 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 |