

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	94.58 %	91.85 %	83.87 %	96.17 %	31	209
B (رقم)	98.68 %	49.67 %	100.0 %	98.63 %	5	146
C (إسم معرف)	87.04 %	57.66 %	77.78 %	88.19 %	18	144
D (إضافة)	84.47 %	63.55 %	47.06 %	88.89 %	17	144
E (منعوت)	95.36 %	63.0 %	100.0 %	95.24 %	4	147
F (نعت)	88.62 %	57.69 %	52.63 %	93.24 %	19	148
G (حرف جر)	100.0 %	100.0 %	NULL	100.0 %	0	26
H (إسم مجرور)	63.16 %	62.75 %	20.0 %	78.57 %	5	14
I (وحدة قياس)	100.0 %	100.0 %	NULL	100.0 %	0	79
J (واو العطف)	96.3 %	49.06 %	NULL	96.3 %	0	27
K (فعل مبني للمجهول)	91.67 %	47.83 %	66.67 %	100.0 %	3	9
L (المفعول المطلق)	0.0 %	0.0 %	0.0 %	NULL	1	0
M (أداة عطف غير واو العطف)	83.33 %	45.45 %	NULL	83.33 %	0	6
.	99.63 %	49.91 %	NULL	99.63 %	0	811

Table 1: Performances for each tag using our ingredient extractor for fold 2 with  $\lambda = 4$  when accuracy is 100% on first layer

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	unknown words percentage
0	95.78 %	67.91 %	61.11 %	97.38 %	78	9.67 %
1	94.34 %	66.51 %	68.85 %	95.87 %	107	13.26 %
2	94.98 %	67.32 %	67.96 %	96.44 %	88	10.9 %
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances in predicting ingredients states for fold 2 with  $\lambda = 4$  when accuracy is 100% on first layer