**AG’s News**

Use AdaGrad

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | end\_acc [%] | paper\_acc [%] |
| uni | 10 | 10 | 0.05 | 88.2 | 91.5 |
| uni | 10 | 10 | 0.10 | 88.7 |
| uni | 10 | (5)10(20) | 0.15 | (86.1)89.1(89.2) |
| uni | 10 | 10 | 0.25 | 88.8 |
| uni | 10 | 10 | 0.50 | 86.8 |
| uni | 10 | 10 | 1.0 | 89.3 |
| uni | 10 | 10 | 1.50 | 90.3 |
| uni | 10 | 10 | 2.0 | 90.4 |
| uni | 10 | 10(20) | 3.0 | 91.1(91.5) |
| bi | 10 | 10 | 0.05 | 88.2 | 92.5 |
| bi | 10 | 10 | 0.10 | 88.2 |
| bi | 10 | (5)10(20) | 0.15 | (88.1)89.1(87.9) |
| bi | 10 | 10 | 0.25 | 87.9 |
| bi | 10 | 10 | 0.50 | 87.5 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | end\_acc [%] | paper\_acc [%] |
| uni | 10 | 20 | 3.0 | 91.51 | 91.5 |
| uni | 15 |  |  | 90.2 |
| uni | 20 |  |  | 92.2 |
| bi | 10 | 20 | 3.0 | 91.8 | 92.5 |
| bi | 15 |  |  | 92.0 |
| bi | 20 |  |  | 92.7 |

**YelpP**

Use SGD

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | End\_acc [%] | Paper\_acc [%] |
| uni | 10 | 10 | 0.50 | 92.5 | 93.8 |
|  |  | 10 | 1.0 | 92.6 |
|  |  | 10 | 1.50 | 91.8 |
|  |  | 10 | 2.0 | 93.8 |
|  |  | 10 | 2.5 | 92.3 |
|  |  | 10 | 3.0 | 92.3 |
|  |  | 20 | 4.0 | 93.0 |
|  |  | 20 | 5.0 | 93.0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | end\_acc [%] | paper\_acc [%] |
| bi | 10 | 20 | 3.0 | 92.4 | 95.7 |
|  | 15 |  |  | 95.3 |
|  | 20 |  |  | 94.8 |

**YelpF**

Use AdaGrad

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | End\_acc [%] | Paper\_acc [%] |
| uni | 10 | 10 | 0.50 | 47.7 | 60.4 |
|  |  | 10 | 1.0 | 43.3 |
|  |  | 10 | 1.50 | 51.6 |
|  |  | 10 | 2.0 | 49.8 |
|  |  | 10 | 2.5 | 50.7 |
|  |  | 10 | 3.0 | 58.0 |
|  |  | 20 | 4.0 | 57.8 |
|  |  | 20 | 5.0 | 56.1 |
| uni | 10 | 20 | 6.0 | 60.6 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ngrams | dim | max\_epoch | lr | end\_acc [%] | paper\_acc [%] |
| bi | 10 | 20 | 3.0 | 62.9 | 63.9 |
|  | 15 | 20 | 3.0 | 65.1 |