|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Document Convolution**  **vector *d* Filter Classifier filter** | **Personality traits** | | | | |
| **EXT** | **NEU** | **AGR** | **CON** | **OPN** |

\*Bold indicates the best result for each trait.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N/A | N/A | Majority | N/A | 51.72 | 50.02 | 53.10 | 50.79 | 51.52 |
| Word *n*-grams | Not used | SVM | N/A | 51.72 | 50.26 | 53.10 | 50.79 | 51.52 |
| Mairesse12 | N/A | SVM | N/A | 55.13 | 58.09 | 55.35 | 55.28 | 59.57 |
| Mairesse | N/A | SVM | N/A | 55.82 | 58.74 | 55.70 | 55.25 | 60.40 |
| (our experiments) |  |  |  |  |  |  |  |  |
| Published | N/A | N/A | N/A | 56.45 | 58.33 | 56.03 | **56.73** | 60.68 |
| state of the art per trait12 |  |  |  |  |  |  |  |  |
| CNN | N/A | MLP | 1, 2, 3 | 55.43 | 55.08 | 54.51 | 54.28 | 61.03 |
| CNN | N/A | MLP | 2, 3, 4 | 55.73 | 55.80 | 55.36 | 55.69 | 61.73 |
| CNN | N/A | SVM | 2, 3, 4 | 54.42 | 55.47 | 55.13 | 54.60 | 59.15 |
| CNN + Mairesse | N/A | MLP | 1, 2, 3 | 54.15 | 57.58 | 54.64 | 55.73 | 61.79 |
| CNN + Mairesse | N/A | SVM | 1, 2, 3 | 55.06 | 56.74 | 53.56 | 56.05 | 59.51 |
| CNN + Mairesse | N/A | sMLP/FC | 1, 2, 3 | 54.61 | 57.81 | 55.84 | **57.30** | 62.13 |
| CNN + Mairesse | Used | sMLP/MP | 1, 2, 3 | **58.09** | 57.33 | **56.71** | 56.71 | 61.13 |
| CNN + Mairesse | Used | MLP | 1, 2, 3 | 55.54 | 58.42 | 55.40 | 56.30 | **62.68** |
| CNN + Mairesse | Used | SVM | 1, 2, 3 | 55.65 | 55.57 | 52.40 | 55.05 | 58.92 |
| CNN + Mairesse | Used | MLP | 2, 3, 4 | 55.07 | **59.38** | 55.08 | 55.14 | 60.51 |
| CNN + Mairesse | Used | SVM | 2, 3, 4 | 56.41 | 55.61 | 54.79 | 55.69 | 61.52 |
| CNN + Mairesse | Used | MLP | 3, 4, 5 | 55.38 | 58.04 | 55.39 | 56.49 | 61.14 |
| CNN + Mairesse | Used | SVM | 3, 4, 5 | 56.06 | 55.96 | 54.16 | 55.47 | 60.67 |