PubMed Text Similarity Model and its application to curation efforts in the Conserved Domain Database

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**Supplementary file: Results-of-reference-suggestion**

Table S1 Articles suggested and accepted as references for the CDD records in our dataset

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CDD-id | Number of referenced articles in the CDD Record | References suggested by text mining | Number of articles accepted as a reference | Number of sentences w/ suggested references | Number of sentences with an accepted reference |
| 100007 | 14 | 6 | 6 | 4 | 4 |
| 107251 | 9 | 6 | 5 | 3 | 3 |
| 132757 | 10 | 6 | 6 | 4 | 4 |
| 133064 | 7 | 4 | 3 | 4 | 4 |
| 143204 | 7 | 7 | 2 | 5 | 4 |
| 153288 | 17 | 14 | 13 | 10 | 10 |
| 153373 | 9 | 9 | 4 | 8 | 6 |
| 185765 | 12 | 9 | 8 | 12 | 12 |
| 187723 | 8 | 7 | 0 | 3 | 0 |
| 188681 | 6 | 6 | 6 | 5 | 4 |
| 188701 | 9 | 9 | 8 | 8 | 5 |
| 193545 | 7 | 5 | 3 | 8 | 6 |
| 198264 | 6 | 5 | 5 | 12 | 12 |
| 198339 | 12 | 11 | 10 | 7 | 7 |
| 200511 | 13 | 11 | 9 | 9 | 9 |
| 200538 | 11 | 5 | 5 | 8 | 8 |
| 206675 | 9 | 9 | 7 | 12 | 10 |
| 238367 | 4 | 3 | 2 | 4 | 2 |
| 238633 | 1 | 1 | 1 | 3 | 3 |
| 239094 | 4 | 4 | 2 | 5 | 4 |
| 239709 | 18 | 12 | 11 | 5 | 5 |
| 239798 | 5 | 5 | 3 | 2 | 2 |
| 239829 | 8 | 8 | 5 | 7 | 7 |
| 239981 | 9 | 7 | 4 | 8 | 5 |
| 240878 | 5 | 5 | 3 | 3 | 2 |
| 259871 | 7 | 6 | 3 | 6 | 5 |
| 269858 | 23 | 17 | 16 | 7 | 7 |
| 270060 | 13 | 8 | 7 | 17 | 14 |
| 270530 | 5 | 5 | 3 | 5 | 5 |
| 270805 | 7 | 7 | 6 | 9 | 7 |
| 276854 | 16 | 12 | 8 | 13 | 10 |
| 277120 | 7 | 6 | 5 | 9 | 6 |
| 277224 | 13 | 13 | 6 | 8 | 8 |
| 320362 | 36 | 28 | 26 | 10 | 9 |
| 320369 | 20 | 15 | 13 | 8 | 8 |
| 99806 | 6 | 6 | 3 | 4 | 3 |
| 99952 | 22 | 15 | 13 | 5 | 5 |
| TOTAL | **395** | **312** | **240** | **260** | **225** |
|  |  |  |  |  |  |
| ACCURACY |  | **78.99** | **76.92** |  | **86.54** |

Table S2 The Discovery articles and their inclusion as new references.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CDD-id | Number of full text articles suggested | Number of more recent articles | Number of articles accepted as a reference | Number of recent articles accepted as reference |
| 100007 | 32 | 23 | 12 | 8 |
| 107251 | 29 | 28 | 8 | 8 |
| 132757 | 35 | 23 | 2 | 0 |
| 133064 | 35 | 33 | 7 | 6 |
| 143204 | 46 | 41 | 22 | 20 |
| 153288 | 73 | 56 | 43 | 30 |
| 153373 | 59 | 44 | 9 | 9 |
| 185765 | 64 | 41 | 45 | 33 |
| 187723 | 29 | 24 | 2 | 0 |
| 188681 | 48 | 33 | 1 | 1 |
| 188701 | 60 | 45 | 41 | 34 |
| 193545 | 69 | 63 | 17 | 16 |
| 198264 | 107 | 63 | 81 | 48 |
| 198339 | 54 | 38 | 35 | 27 |
| 200511 | 73 | 56 | 32 | 22 |
| 200538 | 48 | 28 | 12 | 6 |
| 206675 | 90 | 68 | 56 | 40 |
| 238367 | 36 | 34 | 9 | 8 |
| 238633 | 27 | 23 | 2 | 2 |
| 239094 | 48 | 42 | 9 | 8 |
| 239709 | 43 | 37 | 33 | 29 |
| 239798 | 18 | 14 | 12 | 9 |
| 239829 | 48 | 33 | 36 | 23 |
| 239981 | 69 | 62 | 42 | 41 |
| 240878 | 26 | 14 | 19 | 9 |
| 259871 | 50 | 32 | 29 | 24 |
| 269858 | 63 | 25 | 50 | 18 |
| 270060 | 117 | 43 | 59 | 21 |
| 270530 | 27 | 17 | 10 | 8 |
| 270805 | 86 | 73 | 28 | 27 |
| 276854 | 112 | 32 | 66 | 20 |
| 277120 | 66 | 43 | 12 | 8 |
| 277224 | 75 | 28 | 34 | 12 |
| 320362 | 89 | 34 | 57 | 23 |
| 320369 | 69 | 27 | 63 | 23 |
| 99806 | 39 | 31 | 23 | 18 |
| 99952 | 41 | 27 | 33 | 23 |
| **TOTAL** | **2100** | **1378** | **1051** | **662** |
|  |  |  |  |  |
| **Accuracy[[1]](#footnote-1)** |  |  | **0.50** | **0.48** |

1. We anticipate that the accuracy will improve with further optimizations, as discussed in the paper. [↑](#footnote-ref-1)