

Table 4

The results of computing the value of CTPH and the editorial distance between hashes of the obfuscated source code of grum software

File number in the dataset	grum file hash values (20 byte)	grum file hash values (512 byte)	Editorial distance	Percentage of malware samples calculated using scdeep	Percentage of malware samples computed using convolutional neural networks			Percentage of malware samples computed using capsular neural network		
					Training epoch			Training epoch		
					I	II	III	I	II	III
1.	b9b1d8b87140f977969c 90d716879d7416c14400	1f715f10b18677064f17 400dc9756970c1740c57	32	34	30	31	33	45	48	47
2.	4f0771747c9486dc4fbf d5870c078f4f005901fb	081cdf5f64f50015d5dd f5678bd75fdc01b7cbd1	35	35	35	36	34	45	48	46
3.	d86c9c51864f4f1dc4f7 6fccdd6d941dd4f891dd6	77840d76d1c1cbb50841 1f9151d9cd7cd948d75d	34	38	38	38	39	49	47	47
4.	bd77fd5181dc004dd181 bd714857d75c71d944a5	784f9d7057df5c54f81d 7dfc097d7d674fd9cdf6	31	30	29	29	31	42	41	40
5.	85b1d1767546f9d1c71b 41d4b1576158107491d8	5dd74f74fd879d6d7bd1 19f4bc1761d910d74fdc	27	31	33	33	31	37	39	39
6.	dc990cd40fcd0d1bf0cd c1781015b1075c51f9f1	f7b59691d8f81cc7c1d7 cd4c19d1d4f1cf0d6581	33	32	30	31	32	33	35	31
7.	b4f7df1d7081c776f98d c049459c1f7d10145c6d	f7fd91d14bc615d48dbd d17c1b9f9f4ff10fddb5	32	33	38	37	38	42	41	40
8.	91f506f56d67b19dd4db dc1d1d519c9c08410610	f7fd91d14bc615d48dbd d17c1b9f9f4ff10fddb5	31	38	38	38	39	42	41	41
9.	4fd1c6d678d7bd166754 088d4541c51598c0f44f	fdcd09b8d544df101b71 159c4d07cd64fcb19191	33	37	46	48	47	52	54	59
10.	d179b045148168967844 f4714d1d610015d45b89	175d64f545cb1fd47099 4c0d786417d1d1fd5551	32	36	34	35	36	39	38	38
11.	9d5d6dfdfd7c8dd05fb8 5b7474916bb64fd8bb1d	175d64f545cb1fd47099 4c0d786417d1d1fd5551	31	35	37	38	38	48	48	47
12.	51c1cb9dccc79fddddd9 c0dd95d675fb845f174b7	d4f6810c75b4d161cf0d 8145771cd45b548098b1	35	34	33	34	36	42	41	42
13.	14794fc81c19c5d14167 cd4f008b84194f589f09	497516d6dd7d7f0dfb88 4994c71b158801875d18	37	39	40	40	39	49	48	52
14.	dbfb0b8c0578158b5d1 6106f918d894f1c4f0519	c6c5019810566c4d818f b7d451c474dd18d05b91	33	40	41	42	46	52	56	58
15.	c94f176d18b71474d017 c78d4dbf4f51b4f78740	75d0cc0f4b58c767f5c7 f054f71c197b15601c91	37	41	44	46	48	45	48	46
16.	04b669405085c75db0cd f1918758169d0c7d6c09	ddb88577cdcf190ff987 4f51dbf8d7b617d71b05	34	44	49	48	44	58	59	61
17.	67b457695160b994d776 914b40770c8bd9c719b0	f5976504951d9d77176b d07f151b87176bd4fddb	33	35	41	40	38	49	51	52
18.	c7cd5cd771874fc1f17b 0cbc8c5f4dd94fcf5084	817c64f1dd0d171d8dd7 158817c6df4f057d0bd0	34	48	48	47	47	55	58	59
19.	4707fc70b4f04fcd0b1f 64c5d7dd16d4f87d787d	18bc177d794978141d6f 1cc14f9170d99f44f9d7	34	42	58	59	56	54	59	59
20.	70bdc47d4fcb97d77f9 089d151ff17769d064fd4	818bd95dd794d6748816 864d46c146d9d910d857	34	43	40	41	42	49	55	57