

Table 5

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

File number in the dataset	grum file hash values (40 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.	d4994900806b4b0d928c b9099860c89049d80709	c69c99890899c90c24cd 97698088cbcd00c4bc0b	30	37	41	44	46	37	34	36
2.	72774d906c8494029486 b4009cc994822d044d72	d0c09940c9720490096c 9dc4b7699788879d64d8	33	41	49	51	49	37	38	37
3.	ccb79c4274c049cdd49 078604042b6208987b47c	c4668899698cb9997844 c276b8409c7b064d8c4c	37	44	51	52	52	37	39	39
4.	c4668899698cb9997844 9276b8409c7b064d8c4c	c4028096d6c74b049708 dc09429028277c876684	29	35	41	42	44	30	32	33
5.	c960cd9098c96c0c9bb2 7b4998269097dd4c9c48	68998db4b2bd4c0c9bb2 7b4998269097dd4c9c4	13	23	29	28	29	31	35	32
6.	0cb86bd0247cdd469d8 c89b7c26686908407c8bc	dd447bb4b2bd469c400 9402d9b69899682cb08c9	31	37	41	42	44	39	38	37
7.	9bd2008044b0cc884990 2bc094c980679b720409	08707cc0760b0489b898 07c8879c478606dd9498	33	39	44	45	46	32	31	32
8.	b864889748c8290c9d0d 0c6497697b648496b4c2	d09cdc9b60b8c4894224 d7802c7c904d09b4c400	33	38	41	42	43	35	34	33
9.	d96d9947c92cc8740c70 0c964d96922909dc28d8	04849dd4c0074b00c979 469604c7864dcdbd8094	32	39	41	42	46	32	31	32
10.	60c02487806cc6462999c 968d66896d44097268d	4dc68998bcc60d77404b 768d99c9482b84bbcc44	33	35	34	37	37	30	29	29
11.	4044679249c477c60c49 9cdc9c4680060709c420	79209976867c692bcc48 27978d92840d98c9cc29	31	34	40	39	39	30	29	28
12.	4048927428c0c98944bd 00496c4248d8dbc7b090	8ee8927428c0c98944bd cc496cc298d8d8869247	14	19	24	27	25	14	18	17
13.	8c4800ccd4908c4b9907 cc496db708474778cd8b	89840d2024cd927709c8 d299dd494488909409d0	33	35	39	41	42	42	30	32
14.	d909292648bc6c9c87cd 2c0b0c2844b2cb220947	d8067464600006b269c4 9749c0994ccc2887c89b	34	34	44	45	45	30	35	34
15.	d8067464600006b269c4 9749c0994ccc2887c89b	29688464600786b269c4 9749c046cddc28870cc4	16	29	38	37	38	25	29	28
16.	0dc297646c4696b26029 9749cd04cccc2788c89b	7cbb2089882747609842 99c092866c0844090cd0	35	28	39	38	38	28	27	26
17.	906040c6c09489ccc79b b6279290c8080976898d	4c49820b799498774c8c 0c688967c99994c4c099	35	39	44	46	48	32	34	35
18.	c9b788899994cd970c80 9b648884289b84222b70	6282d992420d9b400477 6999bc494987498907d6	33	34	39	38	34	36	36	32
19.	c7b79d209094cc008424 84494989b9244d9c4c49	448cd4999b92c7cc9d74 97c9846290999447c988	31	35	41	42	44	46	45	48
20.	092496db99cd2824c086 99049db62947c4984964	c94d9989c7878668b284 994709d44d898bc89779	29	39	41	42	43	32	33	34