

Table 1

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 (20 byte)	grum file hash values (40 byte)	Editorial distance	Percentage of malware samples calculated using <b>scdeep</b>	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.	f9f558f87730f9cc969c905cf68c9cc3f6cf3300	5f7fff50ff86cc06577c300cc97f69c0c7c30cfc	30	37	32	34	32	28	30	29
2.	534775737c9386cc57ffc8e0c078f5f00f907ff	087ccfff6f7f00ff5f5cfff678f5cff5c05fccfcf	33	34	38	38	39	29	25	26
3.	c86c9cff8675ffccff76fc556593f557f895cc6	7c8305c6cfc5cfff0835f97f5c9c5ccc93855c5	31	28	33	32	34	27	29	28
4.	fc7cfcf785cc003c5787f57538f757fcc5c93333	78f595c0fc5ffcf3f875ccfc09cc7c675f59c5f6	32	35	39	44	43	30	31	35
5.	8ff7cfc67f36f95fc7ff3753f7fc67f850c39fc8	fc5cfc7558c956c7f5759f3fcf76fc9f05cf7cc	26	42	49	51	52	34	36	36
6.	cc990c530fc50c5ff0cc778347ff347fcf5f9f5	fcff9695c8f85cc7c557c53cf9c55ffcf0c6f85	29	32	35	35	34	35	33	33
7.	f7f7cfc08fccc6f985c0393f9c5f75f0f3fc6c	f7fc95cf3fc65fc385fc557c7f9f9f7fff0fccff	25	31	37	39	38	29	30	31
8.	95ff06ff6567f59553cf5cf57cff9c9c083f0650	f7fc95cf3fc65fc385fc557c7f9f9f7fff0fccff	28	27	30	31	32	30	31	30
9.	3f55c656c8ccfc566cf308853f37cf5f98c0f33f	f5cc09f85f33cf34ffc75f9c3c0cc563fcf79797	33	42	49	51	52	40	39	37
10.	5fc9f03ff38f68967833f3c735f56f007fc3ff89	f7f565ff3fcf5f53c0993c0c78637c555ff5f57f	33	45	55	52	53	42	40	40
11.	95f56cfcfc7c8550ff8ffe373976ff6f558ff75	f7f565ff3fcf5f53c0993c0c78637c555ff5ffff	28	37	42	47	46	30	32	32
12.	f5c5cf9ccccc9fc5cc9c0559fc6cfff83fff73fc	5776850ccff35f67cf058f3f7c7cc3ff38098f5	31	41	49	51	52	30	32	34
13.	737975c85c79cf5f3f67c53f008f83f955f89f09	397f76c6cc757f05ff883993c77f5f880587fc78	29	33	39	38	37	28	27	28
14.	38980f8c0fc85f855c56f06f958589557cf34ff9	c6cf059850f66c358f8f5c3f5c37355f850ff97	30	37	39	35	37	30	29	29
15.	c975776578f753c3505ccc8c35fff7f7f778c30	7fc0cc0f3ff8c767ffc7f0f3f75c79cfff605c95	35	52	59	61	62	47	49	48
16.	03f66930f08fc7fcf0ccf79f8cf8769c0cc56c09	5cf88f7cccf590ff98775f55ff8ccf677c7ff0f	32	31	41	46	45	28	28	27
17.	67f3fc69ff60f993c776953f30cc0c8f59cc79f0	ff9c6f039f7c9c7c7c6fc07f7f7f87fc6f55f55f	31	34	42	49	48	29	28	29
18.	146cf102358775c5f7cf0cfc8cff355955cff083	877c63f5c505fc558ccc7f887cc65f534fc50fc0	32	35	42	46	45	30	30	31
19.	3c0cfc347f075c50f7f63cf5c5c56cf78c5787c	f8fc777c7939c8f3f56f7cc53f97c0599f37595c	33	39	48	47	47	30	32	33
20.	c0f5c375ffcf97c7cf908955f7ff5c769506f553	878f59fccc9356c388f6863c36c736c9c9f0c8fc	34	40	49	51	52	31	34	33