

Table 3

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

File number in the dataset	engrat file hash values (20 byte)	engrat file hash values (256 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.	2335479272742b23d2b2 92542c245b72c7072c3b	7320828c9753b229848d cbc45d354423cb222c48	32	33	39	38	36	30	32	33
2.	4477c77c28428474b97c 35c09435355587482b94	202c242427c4c40c7d77 d8c725e57c4cdc9448cb	33	38	48	49	45	30	31	32
3.	7320828c9753b229848d cbc45d354423cb222c48	2742cb2c248b4d724c7bc 3d7828d52250d7478c2	33	39	44	49	45	30	31	32
4.	87d084423259c5275592 304d07c4223de59cd45c	732e5355575ccc052bc4 7d2b24b220857209579c	33	41	44	49	48	30	31	32
5.	c589bd7240c2b4449338 d57c08d3377848744792	7c93542dc4247454d54 72755b89249cbc0774d72	32	46	49	51	53	37	39	38
6.	028027c23c47d242c927 b20bbc77cc47252302c8	b3c0730c23250c734405 c74c7c8772db92820c29	31	48	55	59	58	45	42	41
7.	e535479272742b23d2b2 92542c7238cbc7072c3b	2c74c2cc32572727e52d 2797890b558448b38773	35	31	39	38	39	29	28	30
8.	24429324c942b7482bbd c3c2dc3004348c240554	24cc2d2c4d7494292c02 bd9d7842827c0bd4bdc7	32	35	29	28	29	30	29	28
9.	272704c2b2475d25827c 444972224435b93302b9	3823470b2e5937272790 c4483238b498b29b4cc2	34	39	44	46	48	34	35	34
10.	d355948239b2bb2357d2 24930733822b2c327249	b7470c2c0b295c277437 7d48e543cc27b272b347	31	34	49	46	48	30	31	34
11.	80b72d2bdd48e5ccc747 b427d9c8047d0957c437	72424529932772cd32c7 4d723c9945b947327770	32	42	48	47	44	31	32	30
12.	042085d9032cdc472472 c203c7d37524272db8d8	2cd7890b3b37c24d28492 dd4287b8ccb7c427308	31	47	51	56	55	44	48	47
13.	d90cd7238ccc4247b235 372cb77323537728c922	0b844d72d28b8724283b 9d423885984259474dd3	34	32	36	34	35	29	29	30
14.	9cc297c72200d504282d 8b202b4c2ce5c83c7927	d2d4302d40e52553493 b3d244e5844220e593285	34	34	39	38	39	30	29	28
15.	79d394988d5b724842c3 3c947332d293d5dc407c	45d3554c9474e5879c52 5d95747c7d2ce544ccbd	32	44	43	42	41	37	34	36
16.	7c5225ccc2970cc50277 23c0b7947432282d740b	28d478c4b703c7494524b c247757505420252708	32	49	52	54	52	34	38	37
17.	2d37e5d8cc494420cc47 c4575cc94c3b207595bc	48437c7734474cc08c3bc 37b27c9dc02729b2cc5	30	47	29	51	52	34	34	36
18.	50c09857c94deb52d05 710b227d32245cc8242c7	2370b7383753254bc79e5 243500472d7355b7520	35	46	49	52	52	39	41	13
19.	8d0d55c8c24927d2c7c4 72870784cb24c3c49704	5048827b9e53dc9c84724 53c957d27454d044902	32	38	44	46	48	37	39	38
20.	3092c53272bd2d42894c 52b472039c2dd2793753	7420520452b7497c5b37 805d97cb8cdd5227c244	32	39	45	46	48	31	32	34