

Table 7

The results of computing the value of mean shift between hashes of the obfuscated and source code malware

File number in the dataset	Source code hash values	Obfuscated source code hash values	Percentage of malware samples computed using only convolutional neural networks			Percentage of malware samples computed using mean shift method in convolutional neural networks		
			Training epoch			Training epoch		
			I	II	III	I	II	III
1.	4811c6f06dcf74cdfb007f54487fdc4041c6f78	0f76bc5464c88d7cdfbf c476d508f54dc4c468fc	30	34	39	44	49	47
2.	7408d56d508f0fc8bf4d4c41854c404070654c06	4f6ddd5b54c414f0dc4c d7060bcf67bfd508154c	31	35	36	44	47	49
3.	04c067fb74c4181c01c f8f4cddb4fd16047406c7	b408b761c47d50c6466f 0fc16cb4607087c6c74f	34	36	39	52	54	59
4.	8c7040104cbf8fcf4604 b1c40d7540bc4754c068	fc4c8c7bc0c405440f40 c84cb80dc0c54bc54b6c	42	49	47	61	60	63
5.	4b4c47746468f401fd51 c0fc870b7084054ffc06	871b0107ff640f7d5b6 b4fb7cbd54d5c0cf06544	42	46	48	58	57	56
6.	c0f4c816f4f4cf854b8f 84d40c0f54d54f7b74b0	c4db4f477d4c46fd8d5 b4fc0474c40f647d18f1	37	39	38	44	46	47
7.	7640d5540bb061146c0f 64bfcbc4ffcb6414dcf1	88bd7741646c460f08fc cbb8c808c5440c1d4c0c	34	39	38	52	54	56
8.	04cb4dc70f76c48754cff d0417fb8c4d08174b41	54d5d58c4bbddf5c47bf df1cd5416684b10f8870	39	41	42	51	53	52
9.	ffd56f40d5b47f4c4f8c b04f6b4f06c40cbd5b0f	46d5748104df0f04d41 c46c5408816c8404184	55	56	57	72	79	78
10.	40dff0d0fd56c6fd5f54 17f7610c01f47cf087d1	ffd56f40d5b47f4c4f8c b04f6b4f06c40cbd5b0f	48	47	47	76	75	74
11.	c4d5f04f10c1f84c6b0d 54f6f464c06d5fcdcff8	f16d54fb40878c414f8f cf4064c0d5c6d5d1cd07	37	39	38	55	56	52
12.	04d50f54fcb0c060d5c1c 0b6c8b54c47f8dfc1060	d47fb74d7c108d74fdcf 4fcf7c6c80d768c487d5	42	46	47	64	62	60
13.	bfd404c4f1f4b7b4707c 40d567dd460c48c4c401	40f48054fbf4c54f7c80 66db0cd66cfbb048c540	55	59	57	61	63	62
14.	c464bc7c4db708f080ff f06f64fd5fd54df408cd	bd5014dd5cf747c54cf41 18084054646646fc4fb	39	34	35	44	46	47
15.	641bc4df8d60cf01b6f4 f74c1d5dc4cf8c54d5b7	46d505485448840ddd50 c0f0fdbbb55474c41c4	46	47	42	55	57	59
16.	8bcf48cdd54c16d067cb c4c1dd7c0d504d6fff67	0471154c4d5118760d0 dcfcf66c74d0754f7fff4	37	39	38	55	50	50
17.	140c41bb544d54f04c47 7c8c0f4b140dcf764fc8	1bc54fd5dc546040b61 bf8fff484671f1bc46c4	55	54	42	82	83	84
18.	06c7c1bcf754dcf0dd4c cff84fcd4bfcd8c0c066	c6406c7141cf54544840 1c1bdf4f17f6fcfb47fc	34	36	38	49	47	45
19.	56fb60bd0c1d5f117bd5 4c1fd5c6fc4d57b7ff8f	dfb417fff404f4840d5f 61cd7d5c7cbcb76fb07f	37	39	38	42	48	48
20.	7f0604ffc6fd0884d668 c706d064c06c1f7d5741	bfc4c07cf4dbc5446606 d0674b541fc4cf07ffdc	44	49	47	52	56	59