

Table 1

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.	96191775819445d146491dcc6d9148d491c15554	c11b9461983495d1793dc169b18461b8d1951531	30	29	28	46	49	51
2.	7d7dc63d9d1118137966113914d1b41885145671	1854878193cc1144839915b941d9118c1148d964	32	34	35	44	49	48
3.	b189149d7cb33d51d88819713d717971111151b9	931967494c5b91c41141171146815136bd1d5b5c	32	30	31	46	48	48
4.	7683491971dc48b16d4c416c816176d13cc46549	9984393939d1953146b97c5c4641145b63d15113	37	38	38	55	54	58
5.	897319c1bd4411cc49d15b9ccd14c511b5571635	844149b399143d955174cc1444919b7149531598	40	40	42	55	59	59
6.	4b1c46869db1455d1b747d1d7417596311145131	41c491151191c16111349815bd4115544c97757c	34	34	36	49	51	51
7.	3143161584c35bc4114117974b4b981d969644d4	545111117779774314196b14515915118bcb5d36	38	40	40	55	56	58
8.	15111173614744988b4d4ccc6937b57d39411919	311511dd191561191c151668b4163dc791598491	40	41	41	56	57	58
9.	3c5b657178148541911c746413c168d68453d168	141465c19b79cd37913bb7318d56714938915814	44	43	41	50	53	54
10.	6cb4531475611b4b114d3c143194551c1c47519c	5981919b9c191481d4118311178994193c941191	39	38	34	44	45	42
11.	db8d814bb3bbc1bdb9645c1141511b98d11884b4	c11111d111155349414668c4351514141114d5cb	38	39	42	52	54	54
12.	d54d49d84b1814136411614181d4939911948491	5597cd991c3b131d1579b1c7b39111345981993d	42	41	40	49	48	48
13.	18941b199111d44464b11799b55159c18841c6cb	394c119b14d444b441133611549694914d449648	34	38	39	46	48	47
14.	6878487c115d11d1178c446347b614913cb911b1	c14711114917d533711786b35d643c14155d8c9b	38	37	38	49	48	48
15.	b7bc4914761db84191933441911448b7791d1841	5c1b11144c9984cd64878cbd3469317934854566	34	35	35	49	48	48
16.	71c5b19873d181194178911b45877b4173511111	95b4171639b481946639699b979814644d3d114	34	35	34	38	41	41
17.	913661311317584b168d48814493d7619993145d	488188113574b894d5d4d9874154198179b16c89	44	46	4	49	51	53
18.	93311956949b17469cbd84b99493691c1149b61b	11d81c74911378cd63b3111c6b17181d143c54c3	44	42	46	44	49	52
19.	9111191b7645873318143961d9cdc714319146b3	dd11111871151514111bd89151919d4614151b13	42	44	46	59	56	55
20.	c651d88b547c114511c181c9134b3bdb98b74b95	94611cc13bd48d7dc5d14d31466b17731913c614	37	39	39	56	55	54