

Table 8

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.	cbfe5208bfcd87268b208ef9f52ed6e89a68e0b8	d6ec78ed6bf87df9dce6d2f8eeda62d5d7fde2af	37	38	34	30	29	29
2.	b5cd6ed87bbe7bf525e56500b2d79dffe7fc98d2	d8cd02d8a8d00c000baebfe607fd8ff8ea5fe68a	47	49	45	37	38	37
3.	0decf02d5edd2ded26ddbde6ffafcfafccdd665	ae0fee29ee68f927f0d7d96d5de5079d69e22cd	44	48	52	49	44	41
4.	fc55606e9db8ffdfc6cf09e5d60e00565e27d9e	cf9fb5dbbe8e90fd8ca57e892dea8dfc2eaea072	59	62	60	50	51	52
5.	fdbfee2fedaec6d7d5c5caeba2e880eb0822d50	b5266aacb8babbd75ebd595deaa86eddbbf656e	19	22	21	19	17	17
6.	6ed7cef5fdde78e6857f7dcb7ccf9528fca0d9a	f98dcd7f07fd806f6efaa72659ded7eeba27fbcd	56	59	61	47	48	48
7.	f568299090ef9de555ae0fa0a62e77bf5ae7bce	8f8edee77b2ebdedf0d756eddc8b90b5f8f86cf	53	54	59	44	47	43
8.	b26edbe8f0f687dde226600d22c68daa8ba7ed86	6652e89df26f29a2def2fb2ec5efd2db896bfcf5	49	52	51	43	48	44
9.	57cc8988c625fc55ed0aad9968eafbec28acdac	9958ffe2f6dbc58d7dfb9fbcdceb60d7e99ecf05	48	49	52	37	38	34
10.	0ff57aeacbdd7a62fc9bf72ba27b95dbf2ddb07d	7d2dd5c9edfe7e9598d07577ccea5cdfd05e2fed	51	53	54	55	59	52
11.	679bee5d8a7f977ddf88f6daf027cba7db966fb9	6865f58f0fe5df2fc52ebe daab82f5ad8e8d8eef	44	49	47	39	37	34
12.	b7d00d287b66fc6b5dca2feddd7f0b0dfecfde79	6ce2da9dda6ec9ddcefd709850e85e0ffbef6e20	59	55	52	44	42	40
13.	fe0e06bb0ede68d8f8fd80d50e79867df805c590	adbdb0ffe890877dcdfe852d67f8e0e02b7e9de	65	66	68	60	57	58
14.	5efff7aeae5f0ccd755edf0ebc6e05aeb70df756	0e0ebdd20d8ec5deb6fb52fed29906e6f8eb8bdf	62	61	66	58	57	56
15.	cdb2de60bdfef2a08eed259c568dd502ebc9e5a	feef78d95adb2ced8d0e7eafefe6d60c8dfd0eff	52	57	56	38	42	42
16.	cb5ef27528f2fdfa98fb6bf2a20feff950f7eb82	a7a8faef0dd0f2fbd5defde587facd57e097adf	59	54	59	48	49	45
17.	7ddfd7fbacdd57f56cb575d2967f6bf2d5ffe056	a9865ec5fff820ef9ddbfb0bdfdf672f568fee7e	42	48	46	30	31	34
18.	290b20ffade7c8e5c8d6bddfd88be9d6ebe7f7e	0e7eeda0edae5e5eafe89d8e2ec05f8eb50d0be	31	34	36	27	27	29
19.	5055f08fdc62cd526055bfaf987dde558fab62a6	880d82d6deede8ba6e9ddcd9b65dfcb7ee00968f	62	62	61	55	50	51
20.	ed9f9ef7dc08eedf98fbdad657cf25fffe75f2b	a9ad0a9cf2572e8fadefa7eccce2555b009eec7b	42	46	47	42	49	52