

Table 3

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.	a4d4bdb9174ada47197d9dd7c9d6ce67109ad647	b94c1dd41d1b7dac64a9cdd1dd7d44d144d1769d	33	30	31	48	47	49
2.	dc7d9e6e61dd1d7d44bd6d1dbd44101ddd141dd4	be6741d471a4dabcb7ad4a7e641d14d9cabdd44	34	35	36	46	45	42
3.	4d4d9d4c1010d7dcd6a119b67e6109144d1dd1aa	14610101ddb11016b14d1a4d44d744674ddd7da1	30	31	32	44	47	48
4.	d14d1ddddd110107d4d6dce6d7acda499d167d41b	4d4dc4dd199a4dc7164d17a9dd7b1bae6d61c64d	30	35	34	51	56	57
5.	6ad9bd741d64be619e6dda76ddde6e6d1d744794	1691a4dd64d474a4da1d7aabd9d196b6d174d1d	30	31	32	49	55	54
6.	adde6171da6cdaa44dcdbd14addd1d9d4d19b1db	c1ad1cd9d7bcc197dd711b1d47a774167dd6e6a4	30	34	35	49	55	56
7.	d41ae69d1de64bd1d4bd9da1464bdbcbcd1d74c1b	d6746d6614a1d1d1104d4791d9dbaade6db1d771	34	38	39	59	57	58
8.	d44d91d4c91db7410dddclcdd61dde64d6d4daa1	44ccddd61d719149dcddbd9d1d14101cddb1bd67	34	32	34	51	53	54
9.	94dd416dd4619dd6d6d741c7ddb6dc110d10bccb	a10dc7d9dba1d7adc7dd497a1066b6b1d4a6d4ad	30	29	28	54	55	57
10.	1c14c1ca1d46110491dbd7d7d4e64dce6c4d16cd	1dd4d4dd1c7ca4d419674b4dd714101d4cdd1a91	29	32	34	49	52	53
11.	41d64d6dc6744d49c9101dc9a9cd1d96110d9e69	dc71911077d4a1bdde6bd1ce6414ddbdce66ad7a	34	36	35	56	58	54
12.	a1ab1dd9d1d1db9dd1c19d79110d6de6b4d1c44a	d1d1d67cd1a4174dc7106dc4d47dc6ad610d74db	30	31	32	49	47	48
13.	761c14d101d10dcd7cc1e6961d614c410dadbad1	41ad7ae6b4aadb1d7c19b14c110bcdc9dc494e6	30	34	35	52	54	56
14.	d1ddd41d14a9cad7aa9d1d1dd761101dd49cd1a6	e610d1aaa7a66cdadbc1d4b41b4dda1dd9a79c	30	31	32	48	47	49
15.	79d191910dab141d14c116917e64dd91dad64d16	4ad1aa4c941444d196a4ad9a7e667ddcd4e6ccbd	34	35	36	48	47	48
16.	16ad4ac66497d6cadd1741cddb194e6110d4d71db	10de6dc1b1d1ce694ad1b6d417a1ada1dd4ad7dd	30	31	34	44	49	47
17.	10babdbd1a10dd79191dd14b1ad71ddcdde10cdc	7bd41bd916b1bda4761a6dd61010a7baa4d7b71a	30	31	34	49	51	52
18.	d74cdcd1dddbd97d447ad91d91971b1d7710bacd	106dbdc47d1cd1d1dc1d9cade6a179a7144ddc96	30	31	32	55	55	57
19.	d9b1dcc717d71d77da41041cde6d161dae61aada	110dbdbd610149b171446ddcd7d17a197a94d1dd	32	34	35	59	57	58
20.	6b1714be610d410e66c1d471dac9141ab4cd1bdd	dd7cdcdabdcdb10106c7d6b6ad616d6c17d9d7a4c	30	31	32	48	47	49