

Table 2

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.	4c1a66991a989c46df6f749946bcf71a86bb46cf	91a7799f986881abbcf6f4cd61a5a7b6cf9b9b9f	33	37	39	30	27	29
2.	b5a48991adf89d9fcf5a1adc987d7cf6441a8d6f	f74f9f4f9b5a6f6b6d4df888979787f4cb1a9cf	42	42	44	30	31	33
3.	671af4f8491a9cb98c9f997999f8b1af71a1af7f	1a84844b1ab1af7f99d7f67cf49bd9fd865abf6f	42	46	45	37	39	38
4.	f98f4bf5af998cfd5a4f1a5ab646d4f87f961a1a	6886fc1afd6cf44fdf986b1a9dbd969884b7d97	46	48	49	30	31	32
5.	96f9d41a6f8c9994fd9bdd45a491af69d6fd7df6	5a8f91abc5a5a41a6b1a5a4fc475a7bf7769cdf6	47	44	49	30	32	34
6.	fc5a4cf7f8981a9f45afd9bcfd9f9f6d1a6bf7d	8f5a61acc5a6785a1af7fc5a9c8fdfb71a7fcc8f	34	36	38	30	27	29
7.	f484bfb97941af49f99f91a9c9f6c1a9f89f8649	b94c71a4f8fb95ac64f9cfd7fd9f44df445a969f	41	45	48	30	35	34
8.	fc9f91af7fbb7f9f44b86f7db841a878df71adf4	b5a9f71a91a45abcd9f85a9f7f75a1a9cfbd5af	42	46	45	31	32	30
9.	5a1a9dfc81a8f9fc6f7f9b695a8895afd1a5a5a	7f61af85afb78f76bf4d5af845a9f4695ad89df7	49	48	51	37	38	34
10.	fdf71a91af6cf5a448cfbdf4fdd87f9f5a79bfdb	c7dfcf9d9bcc7991a97fb71a9f995a691a677f4	49	52	56	37	39	39
11.	fc1acfc5adf678f49f8bd9f9f41a4fc1ac4d76cf	1af5a4df7c9cf4d4f9694b41a9f41afdfc1a5a9f	31	30	32	27	27	29
12.	8f5a65a45abf74775af4f7699df45a1afd97f75a	4fbd9f77df6f5a5a1af7dfcc97bfb9dd9f6998f8	34	38	39	26	24	25
13.	5a9b5a1ad9b9f441a94d4885a89dd69f696cf7f9	5af96fbf7fb9fc88695af7fde8b81a4f461af789	39	42	46	37	38	36
14.	f7fb1a89dfd8b9dfdcf98995a1a6f7fb1a7c45a	f9fbf687fcc4dfb1a48d94f9fd46f968f45afd97	39	38	34	30	31	30
15.	1a1af69c87f4f94fc9f868c4f49dc61a68fd94fb	cf6f791acf65a5a1a8bc61a7b1a4f95a7c86c6c9	44	46	49	34	34	37
16.	941a5a61af6f9d86f6f95ac91ab6cf5ad88bccb	f81ac9d9fbf7f91ac98df99f8f66b6b7f4f6f5af	49	48	46	34	31	32
17.	981a1a971afb491a5afc1af79f86fd9f9cc5afc	967c1ad5a1afbfcdfccf7f96fd6f4c1af85ab1af	38	39	39	30	32	31
18.	1a86486fc6941a49c95a7dc9f9cd1a9675ad9f79	fc9f91af995a5abfdf7b8fcf5a71a8bfc5a65a9f	42	46	45	30	35	34
19.	d5a1adfd1af5a89f4d6fc1ad9fcf5a99df698f7b	1a1ac41a799f4fc9761a79f9fd9b7b1a1a67c61a	49	51	53	31	32	30
20.	6bc41a8f8bd1a987f61a5adfb641a1a68f99b988	f449b1a1a995af47f71a5a1ac841af776fbc89cf	37	39	38	27	26	24