

Table 4

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.	b9b1d8b871411977969c91d716879d7416c14411	1171e111b18677164117411dc97e6971c1741ce7	30	31	32	44	49	48
2.	411771747c9486dc41b1de871c17814111e9111b	181cd1e1641e111ededd1e678bd7e1dc11b7cbd1	31	32	33	46	44	47
3.	d86c9ce18641411dc41761cdd6d941dd41891dd6	77841d76d1c1cbbe18411191e1d9cd7cd948d7ed	41	42	44	59	64	62
4.	bd771de181dc114dd181bd7148e7d7ec71d944de	78419d71e7d1ece4181d7d1c197d7d6741d9cd16	30	36	37	47	48	45
5.	8eb1d1767e4619d1c71b41d4b1e761e8117491d8	edd741741d879d6d7bd11914bc1761d911d741dc	22	26	24	55	57	59
6.	dc991cd411cd1d1b11cd178111eb117ece11911	17be9691d8181cc7c1d7cd4c19d1d411c11d6e81	30	31	32	52	55	54
7.	b417d11d7181c776198dc1494e9c117d1114ec6d	171d91d14bc61ed48dbd17c1b9191411111ddbe	31	34	30	49	47	48
8.	911e161e6d67b19dd4dbdc1d1de19c9c18411611	171d91d14bc61ed48dbd17c1b9191411111ddbe	30	34	32	46	46	48
9.	41d1c6d678d7bd1667e4188d4e41ce1e98c11441	1dcd19b8de44d1111b711e9c4d17cd641cb19191	30	31	32	47	48	42
10.	d179b14e14816896784414714d1d61111ed4eb89	17ed641e4ecb11d471994c1d786417d1d11deee1	30	34	3	45	48	46
11.	9ded6d1d1d7c8dd1e1b8eb7474916bb641d8bb1d	17ed641e4ecb11d471994c1d786417d1d11deee1	30	31	32	59	57	58
12.	e1c1cb9dccc791ddddd9c1dd9ed67e1b84e1174b7	d416811c7eb4d161c11d814e771cd4ebe48198b1	36	34	36	57	54	61
13.	147941c81c19ced14167cd41118b841941e89119	497e16d6dd7d711d1b884994c71b1e881187ed18	33	34	35	47	48	46
14.	db1b1b8c1e781e8bed161161918d89411c411e19	c6ce119811e66c4d8181b7d4e1c474dd18d1eb91	30	34	35	57	58	59
15.	c941176d18b71474d117c78d4db141e1b4178741	7ed1cc114be8c7671ec711e4171c197b1e611c91	31	32	32	52	54	55
16.	14b66941e18ec7edb1cd119187e8169d1c7d6c19	ddb88e77cdc11911198741e1db18d7b617d71b1e	30	32	34	55	55	58
17.	67b4e769e161b994d776914b41771c8bd9c719b1	1e976e149e1d9d77176bd1711e1b87176bd41ddb	30	34	35	47	49	52
18.	c7cdec7718741c1117b1cbc8ce14dd941c1e184	817c6411dd1d171d8dd71e8817c6d1411e7d1bd1	32	37	38	52	54	59
19.	47171c71b41141cd1b1164ced7dd16d4187d787d	18bc177d794978141d611cc1419171d9914419d7	34	36	35	51	52	53
20.	71bdc47d41cb97d7719189d1e1117769d1641d4	818bd9edd794d6748816864d46c146d9d911d8e7	34	38	39	49	47	48