

Table 6

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.	e0bd001563085fc351653d0ef1ff5c5ecbdbbeef	e16f8f6e105370e7b0d0fd0831e1f00b613e77f8	29	31	27	22	29	24
2.	73c7f6efef0773dec0f8e018eef7ec0e31f565d3	e00103601d510c065dede6dfd38736600d00d6dc	30	32	34	25	26	24
3.	c3d3c8ceffb7e7d8d0e00d70ffd003e7e3d7edc	06b3e70efe10d861e70bdfd6c3563ece1b6017bc	55	56	57	37	34	32
4.	675d3831316cd31cf787b07e6dd10ddfd7ef5ec1	7e5b008855d8eb31e5f5d6ce80e7ddc3ffee0c33	55	59	54	49	47	45
5.	1757ece0fbb75f1156f31310dded05e3e0858700	bef5d0f06ff50e160ccbcd83b1cede0d5fddb0	61	62	62	55	54	52
6.	b15fc3d550f7350fd8613d1176e0ebfd663107d8	ffef0ee1fe7ddef80fc35e077f7fd88ed0d6e0b	56	58	59	55	53	51
7.	c617bb100f1bf061efdef803feb0ceee16db5ee6	7ddffc7e60bfdfef600ec6dfbd1e1ff873dd867f	56	58	62	37	39	34
8.	0d68f0dbd70351b5030d085d77eedf3dbf1ecdb	e3e871fd0d16c0f566d0d6650ef1ebc0b07d36e0	59	39	34	52	59	54
9.	e6c1fcbffbfdbb1b03e35ede1331e65606ccb018	8600718ec3e10de3c53d5dd11e58ff15bfc8efdc	42	46	48	30	31	32
10.	7d7d03deeddd00d03731585bc77e007f3d5e7c0d	1163368bfe8e816305de800c137e60d33f6ceff6	58	61	62	50	51	53
11.	3dd1fd0dfc0686f8013ef7176f000f1e7cfd57df	f1cc6fed8cbe7f30e158b0e16be1dd0edcb0cbd1	62	64	68	55	59	57
12.	f1cc6fed8cbe7f30e158b0e16be1dd0edcb0cbd1	36087e5fded10fded3fc368eed55f685ed3f5e	29	28	23	19	16	17
13.	0ecbed87df760e57ee8f1dd3f7fb503dd5f73bef	e30c885cebbd1c08e7b1d1f0deef665ebfdf557d	55	59	57	47	49	46
14.	763020eed7bd6ffe600163bf0b03f18b6efed8ff	55bd773f6e60360105f8cbb585d58e33d8fd38d0	22	26	27	17	19	18
15.	0d1385f613fe0f5eeb5153ded8df3e00ef7b73b0	83db3fe77dece61df580be18de7e0ed16e7df51f	42	46	48	37	38	34
16.	ebe8e77e6e65fedf1ccfcdf857db705ed33ff000	57bdfdf7f16e0f7ccb6be1b78bc0380c00100e33	55	59	54	50	48	47
17.	587dedf0e8b15101e60ebf8edd7ee0b8e7330005	f83c507b0d8e03e3d130c53cb5ddc0ceebc3eb68	39	4227	44	31	34	32
18.	03cd671b7e8ef5f00f8f5fe0ddb31df60e7e06c7	b3d5b76fce78c0c6366fd8f6cbe60705706c7ef	61	64	62	55	54	50
19.	73d5cc6000510f85bfedecef5eeced07d03e0d6	e16dddfbeecef310d83cd70ddb8167b1c0d5f3e0	34	38	37	26	24	22
20.	35ff06fdddcf731cd1bb07feee57fd8e0ef061bb	0176b0e36e055d78dfb1ce76c8d51e3d03ce651c	42	46	44	29	27	26