

Table 7

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.	e5aa96fdd2cf7efc2fbb07f4e457f2c40a96fbb	0f76b9ee6495527c2fbfce76ccd5f4e29ece65fc	37	30	34	52	57	54
2.	7ed5cc69905f0fc5bfe2ec4a5eeced07d0e49d6	ef6222fb4ec4aef02cec270ddbcf67bfc9d5ae49	35	39	32	52	55	57
3.	0ecd67fb7ecea5a90acf5f4922bef2a6047e06c7	bed5b76ace7cc0c6e66fdfca6cbe60705796c74f	44	44	46	60	58	56
4.	5c7d4da0ecbf5f9fe604bac4d274e0bce7ee9005	fcec597b9dc40eedfe0c5ecb5d2c0c4ebce4b6c	19	17	18	30	35	38
5.	4b4ce7746e65fedafccacdfc57db705ede9005	57abdad7ff640f7ccb6b4fb7cbc9ec9c09f00eee	19	25	20	36	37	33
6.	9dfec5a6fef49f5e4b5f5e24dcdfee994f7b7eb0	ce2bef47724c46f2f5c9befcde7e94df6472a5fa	11	14	13	25	29	27
7.	76e0994edbbd6aa4690f6ebf9b9effcb64ae2cfa	55b277ea6e69e60f05fccbb5c5d5ceeedca2ecd9	39	35	37	52	57	55
8.	04cbe2c7df769e57e4cff2dea7fb59e2d5a7eb4a	4e9ccc5c4bb2fc9c47bf2fa9244a665ebadf557d	30	32	34	42	49	52
9.	ffcc6fedccb47fe9ef5cb04f6befdd9edcb9cbdf	e69c745ade2f0fde2eace6ceed55a6c5edea5e	22	26	25	37	39	44
10.	ed2ff202fc96c6fc9fe4a7f76a090af47cfd572a	ffcc6fedccb47fe9ef5cb04f6befdd9edcb9cbdf	30	30	32	44	46	48
11.	9499f0efa0caf54c6b02e4f6fe6ecdd9cfc2cff5	fa6ccefb4d575ceaef5fcfed6e9dc9c6cc2a92d7	45	42	42	67	69	64
12.	0ecc0feefcb9d60ccca90b6c5be4ce7f52f9a0dd	247fb7e27cad527ef2cfefcf7969502765ce57cc	42	40	40	64	65	68
13.	bf2ed4cefafefb7be707cedcc6722e60c45ce9e0a	e0fe5de4fbfe9eef7950662bdc2669fbb04594e0	37	38	37	55	59	52
14.	9e6eb97c42b705f05dff0df6efccfccc2fed592	bcc0ae299cf747cee9feaa5054d4e646646fcefcb	18	19	17	34	38	35
15.	6eabce2f526dcf0ab6fef74ca992c49f5c4eccb7	e69904e5ee455ed2299dcdf0f2babbccce7eaceace	22	24	27	34	38	37
16.	5bcfe5929ceca62dd79bc4ca227cdccde26fff67	de7aaeece9caa57602d2cf9f66c7e2d744f7fffe	58	59	59	85	86	83
17.	ae0c4abbeeccc4fde9477959dfeba402cf76efc5	abcbeef992ce46dedb6abf5fffe5467afabc469e	65	62	63	88	92	95
18.	d0c7cab9f7ee29f022e99ff5efc2ebfc2590cd06	96e0697a4acf44eee5eda9ab2f4fa7f6fcfbef7f9	37	39	35	65	67	66
19.	c2fbcbb209accfaa7b9cecafccc6fcec97b7ff5f	2fbea7fffe04fe5edccf6a927ccc7cb9b76fbd7f	30	32	34	48	46	46
20.	7fd604ffc6f205542665c7d020de90d9af7cc7ea	bf9ecd7cfe2bc4ee660d20674beefcecf07ff2c	58	56	57	68	68	71