

Table 5

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.	d4f94fee8e6b4b0df28c bfef9860c8904fd80709	c6fc9f8f08ffc0c24cd 976f8088cbcde0c4bc0b	38	39	34	32	30	31
2.	72774dfe6c8494029486 b40e9cc9f4822d044d72	d0cef940c972e4feef6c 9dc4b769978887fd64d8	42	46	48	37	34	36
3.	ccb79c4274c04fcdd49 078604e42b62e8f87b47c	c46688f96f8cbfff7844 c276b840fc7b064d8c4c	46	49	45	37	38	39
4.	c46688f96f8cbfff7844 f276b840fc7b064d8c4c	c4e28ef6d6c74b04f708 dcef42f028277c876684	46	48	43	34	38	39
5.	c96ecd9098cf6cecfbb2 7b4ff826f0f7dd4c9c48	68ff8db4b2bd4cecfbb2 7b4ff826f0f7dd4c9c4	23	24	26	17	16	12
6.	ecb86bd0247cdd469d8 c8fb7c26686fe84e7c8bc	dd447bb4b2bd469c40e f402dfb6f89f682cb08cf	49	52	54	37	38	31
7.	fbfd2008e44b0cc884ffe 2bc0f4c98e67fb72e4e9	e87e7cce76ebe48fb898 e7c8879c4786e6ddf4f8	54	59	62	37	42	44
8.	b86488f748c82fecfdded 0c64976f7b648496b4c2	defcdcfb6eb8c4894224 d78e2c7cfe4d0fb4c4ee	59	61	61	60	64	65
9.	df6dff47cf2cc874ec7e ecf64df6f2290fdc28d8	e4849dd4c0074be0c97f 46f604c7864dcbd8ef4	42	46	49	37	36	34
10.	60ce2487806cc6462fffc f68d66896d44ef7268d	4dc68ff8bcc60d77404b 768d99cf482b84bbcc44	29	34	35	37	42	42
11.	4e4467f24fc477c60c49 9cdcf468006e7efc420	7f20ff76867c692bcc48 27978d9284edf8c9cc2f	42	46	49	37	35	34
12.	4e48927428cec98f44bd 004f6c4248d8dbc7b0f0	8ee8927428cec98f44bd cc4f6cc2f8d8d886f247	26	29	31	19	19	18
13.	8c48e0ccd4fe8c4bff07 cc4f6db708474778cd8b	8f840d2024cd92770fc8 d29fdd4f44889094efd0	42	46	45	37	38	34
14.	d9092f2648bc6cfc87cd 2ceb0c2844b2cb22e947	d8e674646eeee6b26fc4 9749cef94ccc2887c89b	46	49	42	33	34	31
15.	d8e674646eeee6b26fc4 9749cef94ccc2887c89b	2f6884646ee786b26fc4 9749ce46cddc28870cc4	29	28	26	19	17	17
16.	edc2f7646c46f6b2602f 9749cde4cccc2788c89b	7cbb208f88274760f842 99c092866ce8440f0cd0	52	56	57	46	49	41
17.	9e6e4ec6cef48fcc7fb b62792fec808ef768f8d	4c49820b7f94f8774c8c ec688f67cff994c4c09f	55	59	52	42	41	43
18.	cfb78889f994cdf7ec8e 9b648884289b84222b70	6282d99242ed9b400477 6ff9bc4f49874f8fe7d6	55	59	54	37	38	42
19.	c7b7fd20fef4cc008424 8449498fbf244dfc4c4f	448cd4ffbf2c7ccfd74 f7c98462fe9ff447cf88	62	67	62	55	52	59
20.	0f24f6dbffcd2824c086 ffe4fdb62947c4f84964	c94dff8fc7878668b284 f947efd44d8f8bc8f77f	67	68	71	55	59	54