

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.	cf2a32dbf75d252acc5c0daf5dbc29f7dfdca9ca	d9add5fc757ccc5b2caf9a7a4dafdcf5bdcf77f	49	52	54	37	35	34
2.	c7b7fd2cfadfdc03ca2acff9f9cdbd2aaddacff	fa5ddadfdbf2d7ccdd7fd7d9cfc2da9fdfa7cfcc	49	48	46	37	38	39
3.	dfb75c59f99fcd7acca9bcac5ca259bca222b7c	c252d992a2ad9bacca77cdd9bcfa9c7ffcf7dc	55	59	56	49	45	47
4.	9aca78dc5aff5fddd7fbbc2792fac5c5af7ccfcd	fda9c2cb7f9fd577fc5dad5cfc7ddf99acfc9f	56	57	59	47	41	46
5.	add2d7cacdfcdcb2cc2d97f9cdaacdcd27c5d59b	7cbb2c5d5c27f7ccdcf299dc9270fca5afcdccdc	49	48	46	38	34	37
6.	d5ac7fcac10aacb2cddf97f9cad9adcd25c7d59b	2dc5cfcac7a7c0b2c10f97f9cafc78d25c7c02f	24	29	28	20	19	18
7.	d9c92d2cf5bdccdc7dd2dabcc2caab2db22a9a7	d5ac7fcacaaaac2cddf97f9cad9adcd25c7d59b	30	32	34	28	27	26
8.	cda5acdcd5a5cabffc7ddaafcd7bcca7a77ccdcdb	5dcfcd2c2fdd9277cdc5d29f5dadaacc9c9aafdc	42	46	48	37	38	39
9.	faa5927f2ccad9cfffbd6adcd72fcd5dbc7bfcf	5ee5927f2ccad9cfffbd6dadcd2dcd5dc5cd2f7	34	38	41	24	26	28
10.	aafac7f2adda77dccc99ddcdcf753ca7afca2c	7d2cfd7ccc7cc92bcca52797cd925fadd5c9cd2f	30	30	34	24	22	23
11.	45da2f57c4537cfc2fffd5dc5cc59cdaaad72ccd	2dc7cfff5bddccdd77fcab7c5d99dff2b5abbccaa	46	49	42	54	59	52
12.	dfcdfda7cf2dccc7aac7aadfcaddcf229cfdd25d5	afcf9ddfcc7fbacc97dacfccfd7ccadcbdcada	49	52	54	48	43	42
13.	71ca5cd7f5c52d753fadcdca97cd7bca5f9cbfd2	dad78cfbcab5df59f22fd7ca2d7ddaadcfbfc786	37	38	41	30	31	32
14.	fb2c5cafabc0dc0fdda2b41dac95ac7db72aaa9	a57a7cda7cabaf5fb595a7dc079ca7ccacddffd5	52	55	56	48	42	44
15.	10357bdc2a7cddfc9dc5fb7c2c70cfa5fa7c5bc	ddaf7bbab2bdac9cfcaf2dfbfc9fc52cbc5dd	39	42	46	30	32	31
16.	c9cadd9c9102368745627badd52cdcf7ddad9df5	5cf05dbab2bdadaddbb27badd52cdcf7ddad9df	55	59	57	41	46	44
17.	dfcc5cf9cf5dbdff75afd27cbcfcd7bccfd5cac	daa25afcdcd7fbcad7c5ddadf2fc2c277d57cccf	52	56	51	42	40	43
18.	4db79ca27fccfdda9c7cccfaf2bc2acdc7bf7d	dfcc5cf9cf5dbdff75afd27cbcfcd7bccfd5cac	46	48	43	38	34	35
19.	7277fd0acd5f9fc29f5cbaca9dd9fa522dcfad72	dccad9acc972aafaadcc9ddfb7c9975557fdcfdc	46	44	42	33	34	38
20.	5a09ad5a5acbfcd25dbfaf95c5dc9cafddc7c9	8cfd9dcdc5ddcfcd2fdd97cdc65103cda7cfbdcdb	45	49	42	37	35	38