

Table 8

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.	cb39a2f8b7c7872b8b2f839a7a239b78aab87fb8	fb7caaa7a17839fa7c7bf278aafab27af39392af	36	37	38	42	46	45
2.	bac7baf87a139b7a2aaa baffb2f7a7ff397ca872	f8cff27888ffcfbbbaa bfabf39787f87aa39b8a	34	37	39	44	48	49
3.	ff7c7f2fa3972f392b7fb3939b39afcfa7cc7a1a	aaf39392aaab87a27ff397ab7afaaf7a7baa22c7	36	39	38	32	36	38
4.	7ca7bfbba7b8ff39cb7c7faaa7bf7ffabaa239aa	cfafba7a1a8aaff8caa7a8a2faa87fc27aaaf72	34	34	38	48	47	49
5.	7fbf7a2397a7ccb397acaca7ba2a88f7bf8227af	ba2a1aacb8baa139aabfaaa7aaa8baf39a17bab7	29	30	31	35	42	45
6.	b7f7c39a3939787b8a7f7fcb7ccfaa28fcfa7aa	7a87cff7f3978fb7bafaa72baa7a39aaba239ba7	30	28	28	46	44	48
7.	fab82aafaf7faf7aaaaaf7afab2397b39aa39bca	8f8393939b2ab39ffff7ab397c8bafba787bcbf	40	43	42	52	54	58
8.	b2b39ba8fffb87f3922bbff722cb87aa8ba7af8b	a1a278af72bf2aa27af27b2acaa7f27b8aa17cfa	37	38	37	46	49	48
9.	a7cc8a88cb2afcaaa7faa7caab87afb7c28ac7ac	78a839a2fbfbca839ffbafb39caa1f39aaa7cffa	33	35	37	49	48	46
10.	f39a7aaacb7f7ab27cab392ba27baafb727fbf7f	7f239acaa39a39aaa8ff7a39cc7aac397fa72f39	40	41	39	52	54	56
11.	b7aba7a78a7fa39f7f887b7aff27cba39baa17ba	b8bafa8fffaaff2fca2ab77aab82faaf878f8a7f	38	37	39	42	46	48
12.	b39ff7287a1b7ca1afca2397ff39fbff7cf397a	bc727aaffab7caf7ca7f7fa8afa8aafffb39b72f	30	34	32	45	49	48
13.	39fafa1bf39ab87878ff8f7af39a8b3978facaaf	afb7baff7a8af839fcff78a27b7f8af7f2b7aa7a	31	35	34	49	44	46
14.	4af7f7a7aaa7fcc39aaa39f7bcbafaaab7ff39ab	f7f7bf72ff87cafaa17ba239fa2aafb7b7b78bfff	3	34	38	49	51	53
15.	c7b239bfb7fa392af87a72aacab8f7af27bca7aa	3939787aaafb2c7f87fa7aa3939b7bfc8f39f7f7	33	33	31	45	46	44
16.	cba3927a28727ffaa87a1bf2a2f7a7faaf39ab82	a7a87aaaff39f27bfaf77faa839acfa7afa7a39	32	34	36	37	45	48
17.	7ff7f7fbac7fa39abcba7a72ab7fa1727aff7fab	aa8baaca39f82f39a39b7fbffff7b727ab87aa39	30	28	29	37	38	42
18.	2afb2fffa7a7c87ac8fbff7fc88baa7baba3939	f3939a7afafaaaaaaaf78a78a2acfa787bafffb7	31	31	30	46	48	49
19.	afaa7f8ffcb2c7a2bfaab7afa87f078a87aa12ab	88f782fbfaa7a8bab7a39c7aa1a39cb7a7ffab87	36	38	39	46	48	47
20.	7fafa397fcf839ffa87b77a7ba7cf2afff39a72b	1358faacf2a72a87af7fa7a78ca2aaabff753c7b	31	33	32	49	51	52