

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.	cbd9a2f8b7c7872b8b2f8d9a7a2d9b78e5b87fb8	fb7ce5a7ae78d9fa7c7bf278e5fab27afd9d92af	44	46	47	53	58	55
2.	5ac7baf87aed9b7a2e5abaffb2f7a7ffd97ca872	f8cff27888ffcfffbfe5bfabfd9787f87e5d9b8a	43	46	47	59	58	51
3.	ff7c7f2fad972fd92b7fbd9d9bd9afcfa7cc7aea	e5fd9d92e5ab87a27ffd97ab7afe5f7a7be522c7	37	39	38	61	63	64
4.	7ca7bffe57b8ffd9cb7c7fe5a7bf7ffabe52d9e5	cfafba7aea8e5fff8ce57a8a2fe587fc27e5af72	33	34	36	58	59	54
5.	7fbf7a2d97a7ccbd97acaca7ba2a88f7bf8227af	ba2ae5cb8be5ed9e5bfe5a7e5a8bafd9ae7bab7	39	37	38	61	63	62
6.	b7f7cd9ad9d9787b8a7f7fcb7ccfe528fc7e5	7a87cff7fd978fb7baf7e572be57ad9e5ba2d9ba7	44	46	47	55	59	57
7.	fab82e5faf7faf7e5e5af7afab2d97bd9e5d9bca	8f8d9d9d9b2abd9ffff7abd97c8bafbf878bcbf	37	39	38	64	62	63
8.	b2bd9ba8fffb87fd922bbff722cb87e58ba7af8b	aea278af72bf2e527af27b2ace57f27b8e5e7cfa	37	38	34	55	57	59
9.	a7cc8a88cb2afce5a7faa7ce5b87afb7c28ac7ac	78a8d9a2fbfbca8d9ffbafbd9ce5efd9e5a7cffa	39	37	34	56	54	52
10.	fd9a7e5acb7f7ab27cabd92ba27be5fb727fbf7f	7f2d9ace5d9ad9e5a8ff7ad9cc7e5cd97fa72fd9	34	39	35	55	51	53
11.	b7aba7a78a7fad9f7f887b7aff27cbad9be5e7ba	b8bafa8fffe5ff2fca2ab77e5b82fe5f878f8a7f	34	36	35	56	57	58
12.	bd9ff7287aeb7caefca2d97ffd9fbff7cfd97a	bc727e5ffab7caf7ca7f7fa8afa8e5fffbdb9b72f	46	47	48	55	59	57
13.	d9fafaebfd9ab87878ff8f7afd9a8bd978face5f	afb7baff7a8af8d9fcff78a27b7f8af7f2b7e57a	42	46	47	61	60	63
14.	faf7f7a7e5a7fccd9e5ad9f7bcbafe5ab7ffd9ab	f7f7bf72ff87cafe5e7ba2d9fa2e5fb7b7b78bff	55	57	59	72	76	75
15.	c7b2d9bfb7fad92af87a72e5cab8f7af27bca7e5	d9d9787e5afb2c7f87fa7e5d9d9b7bfc8fd9f7f7	55	53	61	72	73	71
16.	cbad927a28727ffe587aebf2a2f7a7fe5fd9ab82	a7a87e5afffd9f27bfaf77fe58d9acfa7afa7ad9	60	58	57	73	76	74
17.	7ff7f7fbac7fad9abcba7a72ab7fae727aff7fab	e58be5cad9f82fd9ad9b7fbffff7b727ab87e5d9	55	54	59	73	70	75
18.	2afb2fffa7a7c87ac8fbff7fc88be57babad9d9	fd9d9a7afafe5e5e5af78a78a2acfa787bafffb7	44	49	47	72	79	82
19.	afe57f8ffcb2c7a2bfe5b7afa87f078a87e5e2ab	88f782fbfe57a8bab7ad9c7e5ead9cb7a7ffab87	55	59	57	72	73	71
20.	7520ad97fcf8d9ffa87b77a7ba7cf2afffd9a72b	ed58fe5cf2a72a87af7fa7a78ca2e5abff75dc7b	44	49	47	55	57	59