

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.	1f2f32d7f75d252f11510daa35d7129f7dfd1f91f	d9fa2d5f17571115721ff9f7aa3daa3d1f57d1f0af	30	32	33	27	29	28
2.	10a7fd21aa3dfd1031f2f1aa39f91d7d2aa3a2df1aa3	aa35a2dfd7f2d711a27fd7d91f12df9fdaa371f11	42	46	49	29	26	29
3.	df0a5159f99f1a27f11f971f151f25971f2220a1	1252d992f2fd97f11f0a1a2971aa3f917aa31aa37d1	42	42	41	38	39	37
4.	9f1f7fd15aa3f5a2d7f7712792aa31515aa3711f1d	fdf91210af9fd50af15dfd151f17a2f99f1f119f	42	46	48	32	30	31
5.	fa22d71f1df1d172112d97f91daa31d1d2715d597	710a215d5127f711d1f299d19270f1f5aa31d11d1	29	28	28	22	24	27
6.	d5f17f1f110aa31721a2f97f91fd9fd1d2517d597	2d151f1f17f71072110f97f91aa31d7fd2517102f	34	35	36	29	27	28
7.	d9192d21f57d11d117a22df71121aa372d722f9f7	d5f17f1f1aa3aa31721a2f97f91fd9fd1d2517d597	33	37	38	27	29	28
8.	1df5f1d1dfd5f1f7aa317a2aa31d0a11f7f0a11d17	5d1f1d212fa2920a1d15d29f5dfdaa311919aa3fd1	38	38	41	29	29	30
9.	aa3f5927f211fd91aa3f7d16fd1df2f1d5d710a1f1	5ee5927f211fd91aa3f7da2fd1a22d1d5d151d2f7	29	31	32	19	21	22
10.	aa3aa317f2fa2f0ad111f99a21d1f17531f7aa31f21	7d21fd711171192711f527971d925aa3a25191d2f	34	38	39	30	29	29
11.	f5df2f571f5371f12aa3fd15d11591daa3fd7211d	2d171aa357a211d0af1f7715d99daa31275f0a11aa3	39	42	43	30	30	31
12.	df1dfdf71f2d117aa317ffdf1fa21f2291fa225d5	aa31f9a2f1117f7f1197df1f11fd711fd1d7d1fdf	46	42	46	30	34	35
13.	711f51d7f5152d753aa3d1d1f971d0a1f5f917fd2	dfd7f1f71f75df59f22fd71f2d7a2aa3d1f7f17f6	38	37	39	28	27	27
14.	f7d2151aa3f710d10fa2f27f1df195f17d0a2aa3f9	f57f71df71f7aa35f7595f7d10791f711f1a2aa3d5	34	34	39	27	28	29
15.	10350ad12f71a2f19d1d5f0a121701aa35aa371571	a2aa30a7f727df191f1faa312df71f19f1521715a2	39	42	42	30	34	35
16.	191fa291910236f7f5620afa2521d1f7a2fd9df5	51f05d7f727dfdfa20a20afa2521d1f7a2fd9df	27	29	28	19	18	17
17.	df1151f91f5d7daa375aa3d27171f1fd0a11fd51f1	daa325aa31d1d7f71fd715a2fdf2f12120ad57111f	38	39	34	30	30	31
18.	fd0a91f27f11aa31a2f917111aa3f2712f1d10af7d	df1151f91f5d7daa375aa3d27171f1fd0a11fd51f1	38	42	44	31	30	31
19.	720afd0f1d5f9f129f517f1f9a29aa3522d1aa3d72	d11fd9f11972aa3aa3fd119a2f0a19975557fd1fd1	39	35	34	24	26	27
20.	5f09fd5f5f17f71a225d7aa3f9515d191aa3d11719	f1fd9d1d15a21f1d2fa2971d1651031df71f7d17	38	38	42	30	31	32