

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.	b6edb9ee3746bcc4f1be64fcfff43fc9d6db4ed	cf37d1a747ad4e6f9b4a7cbfbfc3794edbd1ef97	22	26	23	42	49	48
2.	edbf47f33cb97d7ef9dc9fea1ffee769fd63ef4	c1cbf9adde94f6e4cc36c64d46c146d9d93ddcae	38	34	35	56	58	55
3.	4edefc7db13d1ecfdb1f64cafefde6d31cef7c7d	3cbc177d7949ec343f6f1cce4f91edf99f41e9fe	26	27	31	42	46	45
4.	cecdacdeec71ecef1ebdcbccaf4ff9eecdadc4	c17c64fedfdf3eefcdde1acc1ec6ffe1daefdbdd	37	38	37	55	59	56
5.	67b4ae69a36db994d7769e4b4deedccb9ce19bd	fa9e6ad49a1d9d7e1e6bdd7f1a1bc73e6bfe3ffb	29	32	31	42	46	48
6.	d4b6694dadcac7adbdcd f193ceac169ddcef6cd9	fdbcca7ecdce9dff9c71eaeafbdcdeb617d73bda	25	29	24	42	38	41
7.	c91e176f1cb7e4efdececd4fbf31a1b317ce4d	7addccdf4bacc767fac7fda4f7ec19eb3a6dec9e	29	30	30	38	42	41
8.	0bfbd2546ae103cbade63d6f9ecfc9ee1c31da39	c6cade9ceda66c4fc3cfbef4aec474ff3cfdab91	18	19	22	34	38	37
9.	14791eccec19caf34367cf4fddcbc439eeac9fd9	497a16d6dd7f7dffbcc4994c71beaccdec7ad1c	30	34	31	49	52	54
10.	aececb9dccde9fd9d9cdff9ad6eafbc4af374be	f116cedceab4f361cfdcf34a7e1cd4aba4cd9cbe	35	35	32	55	59	57
11.	9faf6dfd7cfffdaabcabe474916bb63efcbb1f	37af6e3a4acbeff4ed994cdd7c641efef3ffaaa3	44	49	47	62	64	65
12.	f3e9bd4a34c36c967c44f4e14f3f63dd1ad4abc9	37af6e3a4acbeff4ed994cdd7c641efef3ffaaa3	28	29	27	46	45	42
13.	4ffec6f6ecdebde66ea4 dccf4a41caea9ccdf44f	ffcdd9bcfa44df1d3be1ea9c4ddecf64fcb19191	17	22	24	34	38	35
14.	9efad6fa6f67be9ff4dbfc3f1da39c9cdc43d6ed	f7fd9ed34bc6ead4cfbdfe7c1b9f9f13f3dfddba	28	30	31	46	49	45
15.	b137df3dedc3cee6f9fcd494a9cef7f3d34ac6d	f7fd9ed34bc6ead4cfbdfe7c1b9f9f13f3dfddba	34	35	31	56	58	57
16.	dc99dcf4dfcfddebfdcd c17c1d1ab1d7acae9fe	feba969edcfcecc7cef7cf4c39def333cfd6ace	34	38	35	49	48	44
17.	cab1d3e67a46f9f3c73b41f4b1ae61acede493dc	adfe33e1efce9f6d7bf1e9f4bc3763d93dfe31dc	42	46	48	55	59	58
18.	bd7efda1cedcdd4df1c1bf7e4ca7f7aeced94444	7c3e9fedaefac4fc1fedfcd9ed7d67e3f9cff6	50	52	52	61	64	68
19.	dc6c9ca3c61e333dc3376fcff6f943ff13c9edd6	7ec4dfe6d3cecbbadc4eef91aed9cfecd94cfdcf	46	48	46	55	54	55
20.	e1d77e747c94c6dce1bfdacedcd7cfe3dda9d1fb	dc1cdfaf631add3afafdfa67cbfeaffcdebcbdb3	27	29	28	42	45	44