

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.	b6e1b9ee97f6b2ac3f1be63fc3f9fc9161bfe1	cf9711a7f7a1fe6f9bfa7cbfbfc979fe1b11ef97	30	32	33	48	47	49
2.	e1bfcf7f99cb9717ef91c9fea13fee769f169e3f	c1cbf9a11e93f6ef2a96c6f1f6c1f61919911cae	39	38	40	51	52	54
3.	fe1efc71b1911ecf1b1f6fcafef1e6191cef7c71	9cbc104179f9ec9f9f6f12ae3f91e1f993f1e9fe	37	39	38	49	48	46
4.	cec1ac1eeec71ecef1eb1cb2aca3f3f9eeca1cf	c17c63fe1f1f9eefc11e1a2a1ec63fe11aef1b11	34	35	39	50	49	48
5.	67bfae69a961b99f10469efbf1ee12abf9ce19b1	fa9e6a1f9a11917e1e6b117f1a1bc79e6bfe93fb	40	42	46	59	58	52
6.	1fb669f1a1cac7a1b1c1f199ceac16911cef6c19	f1b2aa7ec1cfe913f9c71eaeafbfc1eb617179b1a	40	41	43	49	55	51
7.	c91e176f1cb7efe3f1eecec13fbf91a1b917cef1	7a112a13fba2a767fac7f1a3f7ec19eb9a61ec9e	39	38	40	46	49	48
8.	0bfb107f6ae109cba1e6916f9ecfc9ee1c911a99	c6ca1e9ce1a66c3fc9cfbe3faecf73ff9cf1ab91	37	39	36	42	42	41
9.	1f791e2aec19caf9f967c3ff11cbcf99eeac9f19	f97a1616117f7f13fb2af99fc71bea2a1ec7a11c	44	46	49	52	54	55
10.	aececb912a1e9f1f119c13f9a16eafbcbaf97fbc	f116ce1ceab3f961cf1fc9fa7e1c1fabafc19cbe	42	46	48	52	55	55
11.	9faf61f1f172a3f1afbcabef7f916bb69efcb1f	97af6e9afacbe3ffe199fc117c6f1efef93faaa9	39	38	34	59	54	55
12.	f9e9b1fa9fc96c967c3f3fe13f9f69111a1fabcb9	97af6e9afacbe3ffe199fc117c6f1efef93faaa9	39	37	37	42	45	41
13.	3ffec6f6ec1eb1e66eaf12a3faf1caea92a13f3f	3fc119bcfa3f1f119be1ea9cf11ecf63fcb19191	36	32	31	49	49	48
14.	9efa16fa6f67be93ff1bfc9f11a99c9c1cf916e1	f7f19e19fbc6ea1fcfb1fe7c1b9f9f19f91f11ba	40	41	44	49	51	52
15.	b1971f91e1c9cee6f9cf1f9fa9cef7f919fac61	f7f19e19fbc6ea1fcfb1fe7c1b9f9f19f91f11ba	30	31	29	34	38	37
16.	1c991c3f1fcf11ebf1c1c17c111ab117acaef9fe	feba969e1cfce2a7cef7c3fc991ef999cf116ace	37	37	36	44	45	41
17.	cab119e67af6f9f9c79bf13fb1ae61ace1ef991c	a1fe99e1efce9f617bf1e93fbc97691991fe911c	33	32	34	35	38	39
18.	b17ef1a1ce1c11f1f1c1bf7efca7f7acee193f3f	7c9e9fe1ae3faca3fc1fe1fc19e17167e9f9c3f6	34	34	35	42	45	46
19.	1c6c9ca9c61e9991c9976fc3f6f9f93f19c9e116	7ecf1fe619cecbba1cfeef91ae19cfec19fc3f1f	46	45	46	49	48	51
20.	e1104e7f7c9fc61ce1bf1ace1c17cfe911a911fb	1c1c1faf691a119afaf1fa67cbfea3fc1ebebcb19	40	40	41	48	47	49