

Table 7

The results of computing the value of mean shift between hashes of the obfuscated and source code malware

128File 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.	973bc36cce3fbefd5669e5d868de9663656c5b95	f85f56786d696ebf600836fedde38dd633fedbcc	49	52	51	44	40	42
2.	7fd60edfc6f6055e666587d060d390d9fd7887ef	bf9e8d7cfe6bcee3660d6067ebee8e8f07df68	52	53	54	44	49	40
3.	c6dbcb609f8cfff7b9ceffc886dc3c97b7fd5d	6dbef7dfd30ede5edc8d6f967ccc7cb9b76dbd7f	59	54	52	49	48	48
4.	d0c7cfb9d7e369f066399df53d86ebd865908d06	96e0697fef8dee3ee5edf9fb6dedf7f6d8f8e7d9	52	55	51	32	37	38
5.	f308efbb33e88edd39e77959df3bfe068f76efc5	fbcb3d996c3e6d3db6fbd5dfde5e67fdfb8e69e	31	34	38	27	29	21
6.	63fbce6d566d8d0fb6f3d7ecf9968e9f5ce3ccb7	e6990e35eee55ed6699dcdd0d6bbbcc3373cefc3	19	12	14	10	11	12
7.	9e63b978e6b705f05ddf0df63d8cf8c36f3d596	bcc0fe699cd7e783e9fef505edee6e66e6d83fb	59	58	51	48	49	46
8.	bd63decedff3b7be7078edc86766e608e583930f	e0d35deedbde9eef7950666bdc6669fbb0e59e30	52	55	59	49	43	45
9.	5bcf35969c3cf66dd79bce8f6678d88d366ddf67	d37ff33c398ff57606d68d9f66c736d7eed7fdde	49	44	43	30	34	31
10.	0e8c0d3edcb9d608ccf90b6c5bee837f56d9f0dd	6e7fb73678fd5673d6cf3fcd79695067658e578c	66	67	61	58	54	59
11.	9e99d0edf0cff5ec6b06eef6fe63cdd9cd86cdf5	ff6c83fbcd57583fef5dcd3d6e9dc9c6c86f96d7	70	70	69	61	65	67
12.	65f30656ebcd58df85fe8ed63e9fe0e76906b3f	e7de5e9d3b3f5c7b090dfe96ed36edf66f0ef68e	29	31	35	29	28	27
13.	9e86df6388ddbe860fecd055edfec6536b6688df	030fb367733e636b630778ff60fcc7e8f96785d	59	54	53	37	46	48
14.	df5eed6ff3e37d6669cf3666ee6c005f0dddb66e	38de930eee0b76bfec6b5c0bc6ebef95d9d6ef8f	52	59	52	44	46	47
15.	dd5fd8d9eed96ff9fdbd67e6f5cecfde9c66e636	658efe5eff5636cdefdc369efd856fdfe360fed	49	48	49	37	37	38
16.	d066dbdf08b7e96ff30f8e8bccc6ef95e6fb0c	bcd8d86eeddb60cd6d6769d6360ddc6f7f760bf6	55	59	54	55	53	54
17.	7e078e08ed88d39d0d7edc5ebd7ede7c6fefecb6	63c58b90df375bdf6d7e7e3937c0bdef90e0f9d6	61	65	67	55	59	51
18.	e06e85bee76ff9cc980d8dd69fb3ff70f8be6673	05337e0696c6e8656539f606cdc50ee738d3ef69	34	37	35	29	28	30
19.	05337e0696c6e8656539f606cdc50ee738d3ef69	e56b697885b5b8090edf606cdc50ee738d3ef69	29	30	34	22	27	20
20.	8e8d3e5e8c766600dbfe3ed7370dceb7306e58de	d9d87dc98dce56ffecce8e05b3edf9b77f5dfd66	81	82	83	70	73	75