

Table 7

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.	e811c6f06dcf7efcdfb0 07f5ee87fdce0e1c6f78	0f76bc5e6ec88d7cdfbf ce76d508f5edcece68fc	30	33	34	24	29	29
2.	7e08d56d508f0fc8bfed ece185ece0e07065ec06	ef6dddfb5ece1ef0dcec d7060bcf67bfd50815ec	34	35	35	29	28	28
3.	0ec067fb7ece181c01c f8fecddbefd160e7e06c7	be08b761ce7d50c6e66f 0fc16cbe607087c6c7ef	30	32	32	24	26	27
4.	8c70e010ecbf8fcfe60e b1ce0d75e0bce75ec068	fcec8c7bc0ce05ee0fe0 c8ecb80dc0c5ebc5eb6c	34	34	31	28	28	29
5.	ebece77e6e68fe01fd51 c0fc870b708e05effc06	871b0107ff6e0f7d5b6 befb7cbd5ed5c0c065ee	30	31	31	31	30	30
6.	c0fec816fefecf85eb8f 8ede0c0f5ed5ef7b7eb0	cedbefe77dece6fdf8d5 befc0e7ece0f6e7d18f1	18	15	17	34	34	36
7.	76e0d55e0bb0611e6c0f 6ebfcbceffcb6e1edcf1	88bd77e16e6ce60f08fc cbb8c808c5ee0c1dec0c	31	32	33	29	33	33
8.	0ecbedc70f76ce875ecff d0e17fb8ced0817ebe1	5ed5d58cebbdf5ce7bf df1cd5e1668eb10f8870	20	19	20	33	35	35
9.	ffd56fe0d5be7fecfe8c b0ef6bef06ce0cbd5b0f	e6d57e810edf0f0ede1 ce6c5e08816c8e0e18e	35	34	34	30	34	34
10.	e0dff0d0fd56c6fd5f5e 17f7610c01fe7cf087d1	ffd56fe0d5be7fecfe8c b0ef6bef06ce0cbd5b0f	30	30	39	27	29	30
11.	ced5f0ef10c1f8ec6b0d 5ef6fe6ec06d5fcdcff8	f16d5efbe0878ce1ef8f cfe06ec0d5c6d5d1cd07	37	38	33	24	26	25
12.	0ed50f5efc060d5c1c 0b6c8b5ece7f8dfc1060	de7fb7ed7c108d7efdcf efcf7c6c80d768ce87d5	20	21	19	38	39	42
13.	bfde0ecef1feb7be707c e0d567dde60ce8cece01	e0fe805efbfec5ef7c80 66db0cd66cfbb0e8c5e0	26	24	25	44	49	48
14.	ce6ebc7cedb708f080ff f06f6efd5fd5edfe08cd	bd501edd5cf7e7c5ecfe1 1808e05e6e66e6fcefb	30	35	34	49	52	54
15.	6e1bcd5fd8d60cf01b6fe f7ec1d5dcecf8c5ed5b7	e6d505e85ee8e0ddd50 c0f0fdbbbd55e7ece1ce	20	22	27	31	33	32
16.	8bcfe8cdd5ec16d067cb cec1dd7c0d50ed6fff67	0e7115eced5118760d0 dcfcf66c7ed075ef7ffe	30	30	30	28	30	31
17.	1e0ce1bb5eed5ef0ece7 7c8c0feb1e0dcf76efc8	1bcb5efd5dc5e60e0b61 bf8ffe8e671f1bce6ce	30	28	31	44	48	47
18.	06c7c1bcf75edcf0dddec cff8efcdebcd8c0c066	c6e06c71e1cf5e5ee8e0 1c1bdfef17f6fcfbe7fc	20	25	24	34	38	37
19.	cdfbcbdd0c1d5f117bd5 ec1fd5c6fced57b7ff8f	dfbe17ffe0efe8e0d5f 61cd7d5c7cbcb76fb07f	30	34	36	50	56	54
20.	7f060effc6fd088ed668 c706d06ec06c1f7d57e1	bfcec07cfedbc5ee6606 d067eb5e1fcec0f7ffdc	31	33	31	46	49	48