

Table 8

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.	cbf10208bfc087268b208ef9fe2e06e89e68e0b8	06ec78e06bf870f90ce602f8100e620e07f0e2ef	38	37	39	30	31	32
2.	bec06e087bbe7bfe210e6e00b20790ffe7fc9802	08c00208e8000c000b10bfe607f08ff810efe68e	42	44	46	35	34	37
3.	00ecf020100020e02600be00e6ffefcfefcc066e	100f10e291068f927f0070960e010079069e22c0	42	46	48	31	34	35
4.	fc10606e90b8ff0fc6fcf0910060e00e6102709e	cf9fbe0bbe8e90f08c107e89201080fc21010072	38	37	39	31	30	30
5.	f0bf102fe010cc6070ec ec10be2e880eb08220e0	be26610cb8bebb0710b0e9e010e86e000bbf6e6e	34	38	39	40	38	37
6.	6e07cefef00e78e68e7f70cbe7ccf9e28fce009e	f980c0f707f0806f6ef10726e90e0710be27fbe0	38	39	37	40	40	39
7.	fe68299090ef901010100fe0e62e77bf010e7bce	8f8e01077b2eb0e0f007e6e00c8b90bef8f86c6f	41	42	46	30	32	34
8.	b26e0be8f0f68700e226600022c680108be7e086	66e2e890f26f29e20ef2fb2ec10f020b896bfcfe	38	39	42	30	31	31
9.	e7cc8988c62efc10e00e e0c996810fbec28ec0ec	99e8ffe2f60bce8070fb9fbe0ceb6007e99ecf0e	32	35	34	29	28	26
10.	0ffe710ecb007e62fc9bf72be27b9e0bf200b070	70200ec9e0fe7e9e98007e77cc10ec0f00102fe0	42	46	45	30	31	32
11.	679b10e08e7f97700f88f60ef027cbe70b966fb9	686efe8f0f100f2fce2ebe010b82f1008e80810f	46	42	46	34	35	34
12.	b70000287b66fc6be0ce2fef007f0b00fecf0e79	6ce20e900e6ec900cef07098e0e8100ffbef6e20	41	42	46	34	35	36
13.	fe0e06bb0e0e6808f8f0800e0e798670f80ece90	e0b0be0ffe8908770c0fe8e2067f8e0e02b7e90e	37	39	38	31	35	34
14.	10fff71010ef0cc0710e0f0ebc6e010eb700f7e6	0e0eb002008ece0eb6fbe2fe0e29906e6fbe8b0f	29	31	34	35	36	34
15.	c0b20e60bf0efe2e081002e9ce6800e02ebc910e	f10f7809100b2ce0800e710fefe6060c80f00eff	38	39	42	31	32	33
16.	cb10f27e28f2f0fe98fb6bf2e20feff9e0f7eb82	e7e8f10ef000f02fb0e0ef01087fec0e7e097e0f	38	42	44	34	36	35
17.	700f07fbec00e7fe6cbe7e02967f6bf20effe0e6	e98610cefff820ef900bf0b00f0f672fe68f107e	34	37	38	31	35	36
18.	290b20ffe0e7c810c806b00f0c88be906ebe7f7e	0e710e0e0e01010310efe8908e2ec0ef8ebe000be	31	35	36	30	29	28
19.	e010f08f0c62c0e26010bfe9870010e8feb62e6	880082060100e8be6e900c09b6e0fcb71000968f	29	24	28	22	24	23
20.	e09f9ef70c08100f98fb00e06e7cf2efffe7ef2b	e9e70e9cf2e72e8fe0efe7032ce2a10b009a6c7b	34	38	39	30	29	29