

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.	d4994900806b4b0d948c b9099860c89049d80709	c69c99890899c90c44cd 97698088cbcd00c4bc0b	37	41	42	30	32	34
2.	74774d906c8494049486 b4009cc994844d044d74	d0c09940c9740490096c 9dc4b7699788879d64d8	44	46	45	30	30	31
3.	ccb79c4474c049cdd49 078604044b6408987b47c	c4668899698cb9997844 c476b8409c7b064d8c4c	44	42	46	30	31	32
4.	c4668899698cb9997844 9476b8409c7b064d8c4c	c4048096d6c74b049708 dc09449048477c876684	46	48	49	30	31	29
5.	c960cd9098c96c0c9bb4 7b4998469097dd4c9c48	68998db4b4bd4c0c9bb4 7b4998469097dd4c9c4	19	22	21	17	14	14
6.	0cb86bd0447cdd469d8 c89b7c46686908407c8bc	dd447bb4b4bd469c400 9404d9b69899684cb08c9	34	38	39	27	29	24
7.	9bd4008044b0cc884990 4bc094c980679b740409	08707cc0760b0489b898 07c8879c478606dd9498	48	51	52	37	34	35
8.	b864889748c8490c9d0d 0c6497697b648496b4c4	d09cdc9b60b8c4894444 d7804c7c904d09b4c400	55	56	59	44	43	43
9.	d96d9947c94cc8740c70 0c964d96944909dc48d8	04849dd4c0074b00c979 469604c7864dcd8bd8094	46	49	51	37	39	38
10.	60c04487806cc6464999c 968d66896d44097468d	4dc68998bcc60d77404b 768d99c9484b84bbcc44	46	48	47	37	34	35
11.	4044679449c477c60c49 9cdc9c4680060709c440	79409976867c694bcc48 47978d94840d98c9cc49	49	49	51	31	34	35
12.	4048947448c0c98944bd 00496c4448d8dbc7b090	8ee8947448c0c98944bd cc496cc498d8d8869447	19	22	24	14	16	15
13.	8c4800ccd4908c4b9907 cc496db708474778cd8b	89840d4044cd947709c8 d499dd494488909409d0	38	39	37	30	31	32
14.	d909494648bc6c9c87cd 4c0b0c4844b4cb440947	d8067464600006b469c4 9749c0994ccc4887c89b	42	46	47	30	31	32
15.	d8067464600006b469c4 9749c0994ccc4887c89b	49688464600786b469c4 9749c046cddc48870cc4	19	21	24	17	18	17
16.	0dc497646c4696b46049 9749cd04cccc4788c89b	7cbb4089884747609844 99c094866c0844090cd0	33	30	31	23	24	25
17.	906040c6c09489ccc79b b6479490c8080976898d	4c49840b799498774c8c 0c688967c99994c4c099	32	31	30	44	48	44
18.	c9b788899994cd970c80 9b648884489b84444b70	6484d994440d9b400477 6999bc494987498907d6	49	48	48	30	31	32
19.	c7b79d409094cc008444 84494989b9444d9c4c49	448cd4999b94c7cc9d74 97c9846490999447c988	37	38	42	49	48	55
20.	094496db99cd4844c086 99049db64947c4984964	c94d9989c7878668b484 994709d44d898bc89779	34	37	38	30	31	32