

Table 1

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.	163907758394e5df46493dcc6d9f48d412c05554	c22b146018a495d379adc369b38e60b8d095f5a0	9	11	11	24	29	29
2.	7d7dc6ad1d2038fa7966f0a9fed2b438850e5673	385e878f1acc20ee8a9105b942d10f8c2348d96e	10	11	9	29	28	28
3.	b289041d7cbaad5fd8883973ad737170323253b1	1a3167e14c5b12c4f04f370fe68052a6bdfd5b5c	11	13	12	24	26	27
4.	768ae93973dce8b36d4c406c8f6376d2acc46541	998ea1a1a1d095a2e6b17c5ce640045b6ad3530a	12	16	11	28	28	29
5.	817a01cfbde420cce1d25b9ccdf4c5f0b55736a5	8eefe1ba9124ad955274ccf44e1f1b7f495a0518	16	15	16	31	30	30
6.	eb2ce6861db0455d3b7e7d2d74f7596a3f3e5fa2	e0ce90052f9fc06022a49825bde2f554ec17757c	18	15	17	34	34	36
7.	af4af6f584ca5bce32e237974beb983d96164ed4	5e520ff07771774a3e216b045f5905028bcb5da6	20	19	20	29	33	33
8.	352f307a6f474e988bedeccc61a7b57da9433929	a23503dd013562313c05f668b436adc79f518490	20	19	20	33	35	35
9.	ac5b6570782485ef92fc746e0ac368d6845adf68	043e65c01b79cda793abb7a28d5672e9a8105824	15	16	14	30	34	34
10.	6cb45a3e7560fbbeb02edacfea94553cfce7539c	598f139b1c210483d4328afff7819e29ac143f92	19	19	20	27	29	30
11.	db8d8febbabbc3bdb1645cf04f503b18d3f884be	c2f020d022055ae9404668cea525f42e33fed5cb	11	13	12	24	26	25
12.	d5ed41d84b38fe3a642360428fd41a99209e8492	5517cd992cab0a3d0571b0c7ba120fa4518291ad	20	21	19	38	39	42
13.	281e0b3190ffde4464b23719b55f59c388e2c6cb	a94c331b04de4eb4400aa6f35e961e134d4e16e8	26	24	25	44	49	48
14.	6878487c2f5d3fd2078c446ae7b60492acb9f2b2	c2e72f00e127d5aa722786ba5d64acfe055d8c1b	30	35	34	49	52	54
15.	b7bce10e760db843921aa4439f3e48b7713d08e3	5c0b33f4ec9184cd6e878cbdae61a279a4854566	20	19	20	31	33	32
16.	72c5b2987ad2809ef7810fbe5877b427a5200f3	15be07f6a9be839466a9619b17980e6e4dad034	18	19	18	28	30	31
17.	90a66fa30a07584b368de8824e9ad76f119a2e5d	e8838832a574b894d5ded987e254318071b06c89	30	28	31	44	48	47
18.	9aaf0956141b27461cbd84b1141a613c2241b62b	32d83c7e120a78cd6aba000c6bf7080df4ac54ca	20	25	24	34	38	37
19.	90f3f13b76e587aa28fea962d1cdc724a310e6ba	dd0f22f87f052504220bd89f5f909d462435fb2a	30	34	36	50	56	54
20.	c650d88b5e7c0045f0c383c10a4babdb18b7eb15	146f2cc2abd48d7dc5d04da3466b377af90ac604	31	33	31	46	49	48