

Table 2

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.	4c0266990e989c46de6f349946bcf30286bb46cf	92f339909868822bbcf604cd6e0ef3b6c29b9b90	49	52	48	37	36	38
2.	bff48990fde89d9fc0fe2fdc983d3cf644f28d6e	034f9f4e9bfe6e6b6d4dfd888939383e4cb0f9cf	52	53	54	46	42	44
3.	63e2f4f8492f9cb98c9299399928bf2f3e200f3e	f284844bf0bf2f3f99d3263c249bd9ed86febe62	55	56	58	48	49	42
4.	09804b2fef998cedff4ef2eeb646d4f8329602f2	6886fc22fd26ce44fd2986be29dbd969884b3d93	59	62	64	48	46	49
5.	96e9d4f2628c99942d9bdd4ef4900f69d6ed3df6	ff8f92fbceeee4f26bf2ff40c43ee3b23369cde6	42	49	52	55	59	52
6.	0cbee4c23289802924ee2d9bcd909f6d2e6bf3d	80ee602ccff638ffe2032cee9c82deb30230cc8f	37	38	32	34	32	30
7.	f484bfb9394f2f49299ff90f9c906c2e9289f8649	b94c3004282b9ffc64f9c2d32d9f44d244fe9690	35	38	34	42	37	39
8.	2c9f92e232bb329f44b8603db84e2838d23e2d24	bee9e32e92f4ffbcdb9f8ef923e3fee29cfbdfef	35	38	34	28	29	31
9.	efe29dec8f28f90cf6f329b69ee889eed20feff	3e62f28ef0b38236b24dfe84ef9e469ef89df3	55	59	57	45	49	46
10.	fdf3229e2f6c0ff448c2bd24fdd83290ef39b2db	c3fdec29d9bcc3990093eb32e9f99ee6902633f4	57	59	55	48	46	42
11.	ec2ec2cfede638f49e8bd9f924e240c22c4d36c2	e00ef4d3c9cf4d429694b420924f2edec00ef92	55	59	58	48	46	42
12.	82ff6ef4feb03433eff423699d24ef220d93e3ef	42bde933d062effef0e3d0cc93beb9dd9f6998e8	62	68	61	48	46	47
13.	ef9bee2ed9b9f442f94d488ee89dd692696ce329	fef962b232b92c8869ef032dc8b8f24f462e0389	48	49	52	37	39	38
14.	f3fb2089d2d28b90d2c29899ef22623ebe23c4ef	09eb2683fcc4dfb0f48d94e9fd46f968e4eefd93	42	46	45	35	38	34
15.	2e02269c83f42940c9f868c4249dc6f268fd940b	cf6239e0cf6fffe0f8bc60e3b22429fe3c86c6c9	22	26	27	22	21	20
16.	9420ee602e629d862629eec900b62c2ffd88bccb	f82fc9d92bf3f9f0c98de99f8266b6b304f60ef0	19	25	24	16	19	18
17.	98e22f93220b249e2effc0e039086ed9f9cceeefc	963c2edffe0eb0cd0cc2e3962d624ce2f8ffbf0e	34	37	38	29	30	34
18.	e2864860c694e249c9ff3dc9f9cd22963ffd9239	2c9e9e2299fefeb0de3b82c2ee3e08b0cee6ff9f	49	52	56	59	54	52
19.	dee2edfd0e2ff8924d60c22d9fc2fe99d2698e3b	e0e0c4f0399f4fc936e039f92d9b3bf2e263c6e0	55	56	57	44	43	45
20.	6bc4e08f8bde2983e6f2efd0b64f2e068e99b988	2449b2f2e99eff43e322fe02c84f2f3360bc89ce	28	29	34	35	32	33