

Table 4

The results of computing the value of CTPH and the editorial distance between hashes of the obfuscated and compile source code of athena software

File number in the dataset	athena file hash values (20 byte)	athena file hash values (512 byte)	Editorial distance	Percentage of malware samples calculated using scdeep	Percentage of malware samples computed using convolutional neural networks			Percentage of malware samples computed using capsular neural network		
					Training epoch			Training epoch		
					I	II	III	I	II	III
1.	cf2a32dbf75d252acc5c 0daf5dbc29f7dfdc9ca	d9add5fc757ccc5b2ca f9a7a4dafdcf5bdcf77f	31	46	49	52	54	37	35	34
2.	c7b7fd2cfadfdc03ca2a cff9f9c9dbd2aaddacff	fa5ddadfdbf2d7ccdd7f d7d9cfc2da9dfa7cfcc	31	45	49	48	46	37	38	39
3.	dfb75c59f99fcd7acca 9bcac5ca259bca222b7c	c252d992a2ad9bacca77 cdd9bcfa9c7ffcfa7dc	30	58	55	59	56	49	45	47
4.	9aca78dc5aff5fddd7fb bc2792fac5c5af7ccfd	fda9c2cb7f9fd577fc5d adc5cfc7ddf99acfc9f	32	53	56	57	59	47	41	46
5.	add2d7cacfcdcb2cc2d 97f9cdaacdcd27c5d59b	7cbb2c5d5c27f7ccdcf2 99dc9270fca5afcdccdc	30	40	49	48	46	38	34	37
6.	d5ac7fcac10aacb2cddf 97f9cad9adcd25c7d59b	2dc5cfcac7a7c0b2c10f 97f9cafcd78d25c7c02f	19	22	24	29	28	20	19	18
7.	d9c92d2cf5bdccdc7dd 2dabcc2caab2db22a9a7	d5ac7fcacaaaacb2cddf 97f9cad9adcd25c7d59b	32	29	30	32	34	28	27	26
8.	cda5acdcdfda5cabffc7 ddafcdb7cca7a77ccdc	5dcfd2c2fdd9277cdc5 d29f5dadaacc9c9aafdc	29	37	42	46	48	37	38	39
9.	faa5927f2ccad9cfffbd c6adcdf2fcd5dbc7bfc	5ee5927f2ccad9cfffbd ddadcd2dcd5dc5cd2f7	13	29	34	38	41	24	26	28
10.	aafac7f2adda77dccc9 9ddcdcf753ca7afca2c	7d2cf7d7ccc7cc92bcca5 2797cd925fadd5c9cd2f	34	24	30	30	34	24	22	23
11.	45da2f57c4537cfc2fffd dc5dcc59cdaaad72ccd	2dc7cff5bddccd77fcab 7c5d99dffcf2b5abbccaa	32	55	46	49	42	54	59	52
12.	dfcdfda7cf2dccc7aac7a adfcaddcf229cfdd25d5	afcf9ddfccc7fbacc97d acfcfd7ccadcdcbdcada	26	49	49	52	54	48	43	42
13.	71ca5cd7f5c52d753fad cdca97cd7bca5f9cbfd2	dad78cfbcab5df59f22f d7ca2d7ddaadcfbfc786	31	37	37	38	41	30	31	32
14.	fbd2c5cafabc0dc0fdda 2b41dac95ac7db72aaa9	a57a7cda7cabaf5fb595 a7dc079ca7ccacddffd5	36	59	52	55	56	48	42	44
15.	10357bdc2a7cddfc9dc d5fb7c2c70cfa5fa7c5bc	ddaf7bbab2bdac9cfca fac2dfbfc9f9c52cbc5dd	29	37	39	42	46	30	32	31
16.	c9cadd9c910236874562 7badd52cdcf7ddad9df5	5cf05dbab2bdadaddbb2 7badd52cdcf7ddad9df	19	59	55	59	57	41	46	44
17.	dfcc5cf9cf5dbdff75af d27cbcfcd7bccfd5cac	daa25afcdcd7fbcad7c5 ddadf2fc2c277d57cccf	29	46	52	56	51	42	40	43
18.	4db79ca27fccffdda9 c7cccfa2bc2acdc7bf7d	dfcc5cf9cf5dbdff75af d27cbcfcd7bccfd5cac	31	42	46	48	43	38	34	35
19.	7277fd0acd5f9fc29f5c baca9dd9fa522dcfad72	dccad9acc972aafaadcc 9ddf7b7c9975557fdcfdc	32	40	46	44	42	33	34	38
20.	5a09ad5a5acbfcd25d bfaf95c5dc9cafddc7c9	8cfd9dcdc5ddcfcd2fdd 97cdc65103cda7cfdbcb	32	41	45	49	42	37	35	38