

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041028261 A

(19) INDIA

(22) Date of filing of Application :02/07/2020

(43) Publication Date : 10/07/2020

(54) Title of the invention : A NOVEL TECHNIQUE FOR REDUCTION OF SOFTWARE ENTROPY AND TO PREVENT INFORMATION LEAKAGE IN MOBILE APPLICATIONS

(51) International classification

:G06F

21/55

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(86) International Application No

:NA

Filing Date

:NA

(87) International Publication No

: NA

(61) Patent of Addition to Application Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

1)Mr. Srinivas Naik K

Address of Applicant :Security Researcher, CSIT, JNTU
Hyderabad, 500048. Telangana India

2)Mr. Shravan Kumar

3)Dr. Chinnadurai M

4)Dr Lalit Garg

5)Dr S V N Sreenivasu

6)Mr.Pankaj Kumar

7)Mr.Abhas Kanungo

8)Mr.Varun Gupta

9)Dr Arun K.K.

10)Dr S.K. Mydhili

(72)Name of Inventor :

1)Mr. Srinivas Naik K

2)Mr. Shravan Kumar

3)Dr. Chinnadurai M

4)Dr Lalit Garg

5)Dr S V N Sreenivasu

6)Mr.Pankaj Kumar

7)Mr.Abhas Kanungo

8)Mr.Varun Gupta

9)Dr Arun K.K.

10)Dr S.K. Mydhili

(57) Abstract :

ABSTRACT Smartphones are the typical mainstream and employed devices by people. They have different kinds of data that can be delegated open and private. It is another wonder to build up incredible malicious diligence to exfiltrate individual information from advanced mobile phones. Henceforth close to home information on these gadgets such as short messages, contacts, photographs, recordings, GPS areas, and so on. Require a particular security component which ensures them from being spilled by vindictive applications. The fundamental issue is the revelation of delicate data when portable applications attempt to get to them utilizing android authorizations. This circumstance reveals to us that these mobile applications will presumably release sensitive information. Thus, a few arrangements, particularly considering information leakage on PDAs, are required. In this invention, we portray data collection, pre-processing, feature extraction, classification and clustering, and how wavelet-based decomposition of programming entropy can be applied to a parasitic malware location task, including enormous quantities of tests and highlights. By extracting just string and entropy highlights from programming tests, we can get practically 99% discovery of parasitic malware with less than 1% false positives on great records. Also, the expansion of wavelet-based highlights consistently improved location execution across conceivable false-positive rates, both in a strings-just model and a strings-in addition to entropy model. Wavelet decay of programming entropy can be valuable for AI models for distinguishing malware dependent on extracting a considerable number of highlights from executable records.

No. of Pages : 13 No. of Claims : 5

FORM I
THE PATENTS ACT, 1970
 (39 of 1970)
 &
THE PATENTS RULES, 2003
APPLICATION FOR GRANT OF PATENT
 [See sections 7,54 & 135 and rule 20(1)]

(FOR OFFICE USE ONLY)

Application No.:

Filing Date:

Amount of Fee Paid:

CBR No.:

Signature:

I. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Mr. Srinivas Naik K	India	Security Researcher, CSIT, JNTU Hyderabad, 500048.	India	Telangana
2	Mr. Shravan Kumar	India	Security Researcher, CSIT, JNTU Hyderabad, 500048.	India	Telangana
3	Dr. Chinnadurai M	India	Professor , Department of Computer Science and Engineering , E.G.S. PILLAY ENGINEERING COLLEGE, NAGAPATTINAM 611002	India	Tamil Nadu
4	Dr Lalit Garg	India	Senior Lecturer, Department of Computer Information Systems, Faculty of Information & Communication Technology, Room 23, Level 1 Block A, ICT Building, University of Malta, Msida, Malta, Europe.	EUROPEAN UNION	Not Applicable
5	Dr S V N Sreenivasu	India	Professor, Department of Computer Science and Engineering, Narasaraopeta Engineering College (Autonomous), Kotappakonda Rd, Narasaraopeta, Andhra Pradesh-522601.	India	Andhra Pradesh
6	Mr.Pankaj Kumar	India	Assistant Professor, ECE, SCRIET ,CCS UNIVERSITY,MEERUT, UP, INDIA,250003	India	Uttar Pradesh
7	Mr.Abhas Kanungo	India	Assistant Professor, EIE, KIET GROUP OF	India	Uttar Pradesh

			INSTITUTIONS, DELHI-NCR, GHAZIABAD-201206, UP, INDIA		
8	Mr. Varun Gupta	India	Assistant Professor, EIE, KIET GROUP OF INSTITUTIONS, DELHI-NCR, GHAZIABAD-201206, UP, INDIA	India	Uttar Pradesh
9	Dr Arun K.K.	India	Assistant Professor, Mechanical Engineering, Kumaraguru College of Technology, Chinnavedampatti, Coimbatore-641049	India	Tamil Nadu
10	Dr S.K. Mydhili	India	Professor, Electronics and Communication Engineering, KGiSL Institute of Technology, Saravanampatti, Coimbatore -641035.	India	Tamil Nadu

2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Mr. Srinivas Naik K	India	Security Researcher, CSIT, JNTU Hyderabad, 500048.	India	Telangana
2	Mr. Shravan Kumar	India	Security Researcher, CSIT, JNTU Hyderabad, 500048.	India	Telangana
3	Dr. Chinnadurai M	India	Professor , Department of Computer Science and Engineering , E.G.S. PILLAY ENGINEERING COLLEGE, NAGAPATTINAM 611002	India	Tamil Nadu
4	Dr Lalit Garg	India	Senior Lecturer, Department of Computer Information Systems, Faculty of Information & Communication Technology, Room 23, Level 1 Block A, ICT Building, University of Malta, Msida, Malta, Europe.	EUROPEAN UNION	Not Applicable
5	Dr S V N Sreenivasu	India	Professor, Department of Computer Science and	India	Andhra Pradesh

			Engineering, Narasaraopeta Engineering College (Autonomous), Kotappakonda Rd., Narasaraopeta, Andhra Pradesh-522601.		
6	Mr.Pankaj Kumar	India	Assistant Professor, ECE, SCRJET .CCS UNIVERSITY,MEERUT, UP, INDIA,250003	India	Uttar Pradesh
7	Mr.Abhas Kanungo	India	Assistant Professor, EIE, KIET GROUP OF INSTITUTIONS, DELHI-NCR, GHAZIABAD-201206, UP, INDIA	India	Uttar Pradesh
8	Mr.Varun Gupta	India	Assistant Professor, EIE, KIET GROUP OF INSTITUTIONS, DELHI-NCR, GHAZIABAD-201206, UP, INDIA	India	Uttar Pradesh
9	Dr Arun K.K.	India	Assistant Professor, Mechanical Engineering, Kumaraguru College of Technology, Chinnavedampatti, Coimbatore-641049	India	Tamil Nadu
10	Dr S.K. Mydhili	India	Professor, Electronics and Communication Engineering, KGiSL Institute of Technology, Saravanampatti, Coimbatore -641035.	India	Tamil Nadu

3. TITLE OF THE INVENTION: A NOVEL TECHNIQUE FOR REDUCTION OF SOFTWARE ENTROPY AND TO PREVENT INFORMATION LEAKAGE IN MOBILE APPLICATIONS

**4. ADDRESS FOR CORRESPONDENCE OF APPLICANT /
AUTHORISED PATENT AGENT IN INDIA:**

Mr. Srinivas Naik K Security Researcher CSIT JNTU Hyderabad
500048

Telephone No.:

Fax No.:

Mobile No:

E-mail: naik.srinu@gmail.com

5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
--------	---------	--------------------	-------------	-----------------------	------------------------